



psa
JOURNAL

VOLUME 18 NUMBER 2

FEBRUARY 1952

*This picture
was ready to mail*

60 seconds after it was snapped

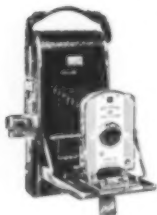
Sgt. Hal Randall of the 17th Infantry took this picture in Korea, where it's not easy to get film developed. But that's never a problem when you carry a Polaroid Camera, the camera that develops its own pictures. Wherever you may be — on vacations, cruising, camping deep in the woods — you'll have finished prints within one minute after you snap the shutter.



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ASK FOR A DEMONSTRATION — 60-second photography is a new experience . . . words alone can't tell you how satisfying it is to see your pictures as you take them. You've got to try it! Your photo dealer will be glad to arrange a demonstration. You'll wonder why you ever waited . . . to see your pictures and to own the world's most exciting camera.

YES — there are fine Polaroid accessories for every photo need: flashgun, filter kit, close-up kit, master compartment case and special GE exposure meter.



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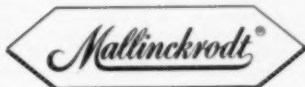
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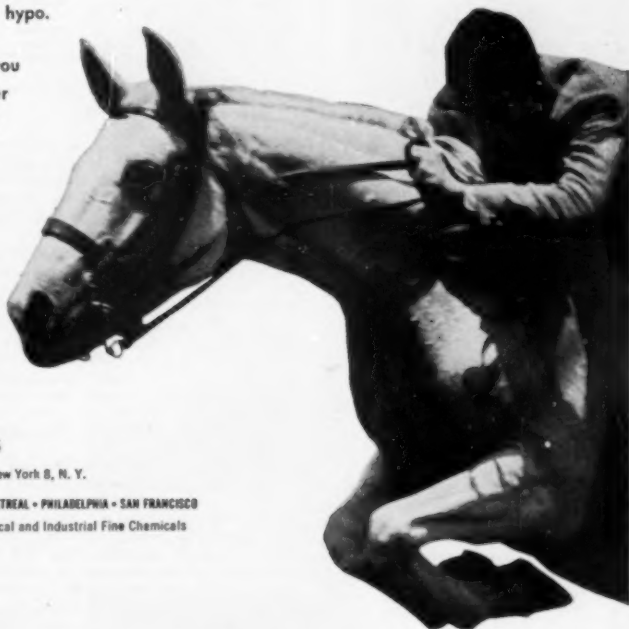
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THE PRESIDENT REPORTS . . .

The "Tops" show was held in Montgomery, Alabama, on January 20, and in Memphis, Tennessee, on the 26th and 27th. It will be in Phoenix, Arizona, through most of February, and then will go back to Louisiana and Texas after Easter.

As this is written before any of those dates, I cannot report on what happened, but having seen the prints and slides as Chairman Paul Wolf sent them out, and knowing the enthusiasm and ability of the local committees, I'm certain that the deep South and the Southeast have a better idea of what we in PSA mean to photography and what PSA can do both for its individual members and for the general level of photographic interest in their communities.

Important as "Tops" is to PSA and to all the members in whose home towns it is staged, it has another angle which, to me, has an even greater value. Some one of these days—and maybe sooner than most of us are likely to think—there will be local PSA activity all over the country. Few members will live more than a couple of hundred miles from a regional center where there will be four or five really worth-while programs every year—programs in which all the members within the region will participate and which will serve both to improve their status as photographers and to give them an opportunity to get to know all their fellow PSA'ers.

But all that has an element of "future". Far nearer is the New York Convention which will open on Tuesday this year with one of the longest forward steps PSA has taken. It is a symposium on "Photography in Biology and Medicine" to which all amateurs and professionals interested in that most specialized type of work are invited. That is on Tuesday, August 12.

On Wednesday there will be another symposium on "Photography in Science and Industry"—again a program of great interest to amateurs and professionals, PSA'ers and non-members alike. Tentative plans also include further sessions on the educational and publishing fields. It's going

to be a big show with fun and technique mixed together.

Incidentally, right now is a good time to start convincing the boss that mid-August is the ideal time for your 1952 vacation and New York the ideal place. A quarter of a million visitors come to New York each week throughout the summer to take pictures and otherwise enjoy the city. We, at the Convention, will have the advantage of air-conditioned meeting rooms at the New Yorker as well as everything else the metropolis has to offer. In addition there may be trips by air or boat before or after the Convention—trips you ordinarily might not take because of the added cost of transportation from home to starting point. The JOURNAL will carry the details.

Take a look at page 28 of the February issue of "Photography". It is most gratifying to know that the Editors regard our news as worth printing.

Now for something less pleasant. PSA as a whole is doing a fine job and has for a long time, but there are a few holes in the picture—holes that are being eliminated as rapidly as possible. The beginning of such elimination lies with the members who point out our weak spots. Then the responsible officers try to work out plans that will fix the trouble area and handle the problem involved as it should be. (Please regard this as an invitation to show me where we ought to make changes or to point out an area of weakness. I'll do what I can.)

Right now the District Representatives are working under a new system to keep in touch with the members who are late in mailing their renewal checks. In the near future, they will have a bigger hand in welcoming new members—a bigger part in most of the Society work. Those DR's are important in PSA. Do you know yours?

Now a hurry-up! Because of the early Convention date, there is not too much time to send in applications for Honors—the deadline is March 1. Get your blanks now.

Remember to let me know what you want PSA to do.

NORRIS HARKNESS

PSA JOURNAL, Vol. 18, Feb. 1952

Matchless SCOPE...

If you are looking for the ultimate in a camera—the $2\frac{1}{4} \times 2\frac{1}{4}$ HASSELBLAD merits your interest. This is particularly true if you pursue your photographic work, and pleasure, with the practised discipline of a perfectionist. For here is an instrument, crafted in Sweden, with built-in refinements that will bring to your picture making a matchless new scope... a new sureness. Interchangeable lenses, interchangeable roll-film magazines, automatic controls, speeds to 1/1600 second, built-in flash — these are but a few of the features that make the HASSELBLAD a "must" for your personal inspection.

Prices — The camera, with 80 mm Kodak Ektar f/2.8 Lens and $2\frac{1}{4} \times 2\frac{1}{4}$ rollfilm magazine, \$535, including Federal Tax. Accessory 135 mm Kodak Ektar f/3.5 Lens, \$250, and 250 mm (10 in.) Zeiss Opton Sonnar Lens f/4 8421.

Endless APPLICATIONS...

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NATURALISTS will appreciate the close-working sharpness of the matchless Ektar f/2.8 Lens... focusing down to 20 inches... and to full scale with extension tubes... without parallax.



PHOTO-REPORTERS will be quick to exploit the dazzling 1/1600 top speed of the HASSELBLAD... excited at the prospect of freezing action at angles too difficult for slower shutters.



ILLUSTRATORS will like the quick interchangeability of the roll-film magazines... permitting the use of different film emulsions, color or black-and-white, in one camera.



SPORTSMEN will thrill at the "reach" of the telephoto lenses that bring distant, inaccessible subjects into working range... thanks to rapid interchangeability of the lenses.



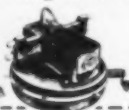
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New Aids for Better Picture Making

JACOB DESCHIN, AP/SA

THE MAKERS of the famous Victor line of light units, James H. Smith & Sons Corp., of Griffith, Ind., apparently are launched on a program of providing amateur photographers with a new line of low-cost lighting equipment. Four items recently announced by the company should sound a responsive chord in many an amateur who wants to try making pictures indoors but is reluctant to spend too much money on the needed equipment.

The Smith people offer four items that should be easy on the pocket. One is the Victor Floodlight Kit, a three-light beginner's outfit selling for \$9.85. The kit includes two clamp-on deep-necked 10-inch reflectors, with No. 2 photoflood lamps, for main lighting, and a clamp-on cone-shaped reflector with a No. 1 lamp for back, high, or other lighting accent. All three units have heat-insulated Bakelite sockets and a bright red directional handle for controlling lighting angle. The complete outfit fits in a red cardboard carrying case with handle.

The three other outfits are the Victor Flood-Master, a three-light device with a bracket that attaches to any movie camera,

sends light from above the lens, may be rotated and tilted, accommodates reflector-flood lamps and costs \$9.95, with case but without lamps; the Victor Bar-Lite, \$5.95, a two-light bar with core clips on the back of the case for winding up the cord when the bar is not in use; and the Victor Tri-Flood bar for three reflector-flood lamps, which mounts on a regular light stand and costs \$7.95.

In the flash field PSAer Myron Jenner has helped the cause of the budget-minded with a low-cost version of the Jen B-C flashgun originally designed for the Leica camera at a much higher price. His company, Jen Products, Inc., 419 West Forty-second Street, announces the new gun as the Jen B-C Pocket Flash. It has all the features of the higher-priced unit plus new ones and costs \$14.95. When collapsed in its carrying case, the new gun is no larger than the reflector itself. The complete unit, which weighs eight ounces, includes a battery case, reflector, shutter cable, condenser, battery and carrying case. The Jen B-C Pocket Flash may be used on any camera with built-in synchronization simply

by changing the mounting shoe or by using a bracket.

Cameras

By the time you read this, there should be on the market a telephoto lens for the 35mm Argus C, C2 and C3 miniature cameras. The lens was developed in Munich, Germany, and is being imported for the American market by Geiss-America, Chicago 45. The company will also be the sole distributor of the lens in this country. The lens is the 100mm (4-inch) f/4.5 Tele-Sandmar, said to be a true telephoto with four coated surfaces, and costs \$69.50. The Tele-Sandmar is in a helical focusing mount; is coupled to the rangefinder; has a depth-of-field scale from three feet to infinity; click diaphragm stops; a built-in sunshade and filter holder; and attaches to the Argus camera in a few seconds, we are told. All readings and markings are on top.

A lighting unit for the medical photographer has been introduced by Walden Industries, Inc., 350 West Fifth Street, New York. It is the Quick-Clix clinical photography unit that attaches to nearly any rollfilm camera and incorporates at-the-camera speedlight flash or regular flood lighting. A special model with fully automatic aperture control is available for 35mm single-lens reflex cameras.

The new model Praktica 35mm Reflex, with Zeiss Tessar f/3.5 and built-in automatic diaphragm, has been imported by Ocean Photo Supply, 11 West Twentieth Street, New York. With eveready leather case, the camera is \$117.50. The camera with f/2 Zeiss Biotar lens and case is \$156.50; with f/1.9 Meyer Primoplan lens and case, \$145.

The improved German-made Iloca Stereo II, imported by Ercona Camera Corp., 527 Fifth Avenue, New York, now has a new frame size, 24x23mm, which permits a yield of thirty stereo pairs from the regular 36-exposure roll. Matched Iltar f/3.5 lenses have a shortened focal length of 35mm. Other features are: all controls visible from the top; focusing through a center wheel; twin Prontor-S shutters with speeds to 1/300th; delayed action self-timer; flash synchronization and hinged, detachable back. The price is \$125.

Bolsey Research and Development Corp., 118 East Twenty-fifth Street, New York, has developed a camera for the Air Forces that automatically starts taking pictures the moment the pilot starts firing his guns. The camera is the N-9 Combat Recording Camera, a remote-controlled picture-taking unit that is about the size of a hand and uses 16mm film in 50-foot magazines. Settings for different light conditions, hazy, dull or bright, can be made by the pilot on the remote control instrument box set on the dashboard of his plane. A flip of the finger does it.

"In order to have a record not only of the actual shooting, but also of its results," the company states, "the camera has an overrun—it continues to shoot pictures a few seconds after the actual firing stops. As a result, a record is made of enemy planes shot down, targets hit on the ground,

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take it easy—WITH STEREO-Realist



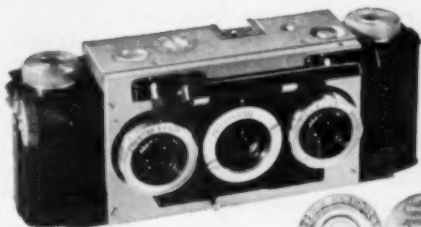
TAKE WHAT YOU SEE... THEN SEE EXACTLY WHAT YOU TAKE

ALTHOUGH experts find new photographic thrills in the true-to-life realism of Stereo-REALIST pictures, you don't have to be an expert to enjoy the REALIST camera. People who never before used a camera find it amazingly easy to take exciting pictures in beautiful natural color and in three dimensions with the REALIST.

The reason is simple. If a scene is pleasing to your eyes, snap it. The resulting picture seen in a REALIST Viewer will be equally pleasing because it is an exact duplicate of the original scene . . . in full color and with breathtaking depth.

With the REALIST you don't have to fuss about perspective or composition . . . or juggle a truckload of equipment. And in third dimension people are so lifelike you almost expect them to speak . . . scenic views are indescribable in their grandeur.

But you have to see REALIST pictures to appreciate them. Ask your dealer to show you some. Prove to yourself that you, too, can "take it easy" with the REALIST. DAVID WHITE COMPANY, 387 W. Court Street, Milwaukee 12, Wisconsin.



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Tailored to REALIST specifications to provide easy means of carrying viewer and slides. ST20-38 (right) holds 30 slides. ST20-4C (left) holds 60 slides. Sturdy, all-wood construction; leatherette, or top-grain leather covering on de luxe custom-made models.



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Also ask about new tax-reduced prices on many items in the Leica family of over 200 camera accessories.



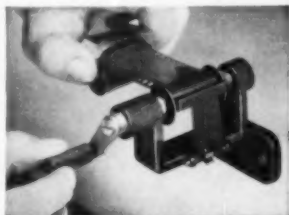
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EASIER

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To shape and trim ends of film for loading into magazine. Fold-over construction engages film... prevents slipping and insures accuracy of cut.

and serves as an actual visual record of what transpired during the action."

Designed to cope with the high speeds of jet planes—relative speeds of 1,000 miles per hour are commonplace in aerial combat—the N-9 has a shutter speed, operating up to 64 frames per second, that is equivalent to 1/1000th of a second exposure.

In the motion picture field, the announcement is made of an improved Pathe 16 camera, imported from France by Director Products, Inc., 570 Fifth Ave., New York. The \$395 camera (less lens) has a full frame focusing device which permits sighting through the lens while actually taking movies. Other features are an improved governor and threading mechanism; pressure pad and release button; and a full scale of six frame speeds up to 80 frames per second for extreme slow motion. The spring motor permits shooting thirty feet of film per winding; the hand crank is built in.

Accessories

Three items are offered by a new company, the H. L. Instrument Co., 313 W. Valley Boulevard, San Gabriel, Calif. One is a metal filter holder for Varigam filters, the Enlarg-O Filter Holder that attaches with three adjustable set screws to enlarging lenses of various diameters up to 1 7/8 inches. The price is \$2.95. Another is the Enlarg-O Arm, an extension aperture control that permits the operator to pre-set for a desired aperture, then open the lens wide for easier focusing, then re-set quickly to the predetermined stop. The metal item is \$1.95. The third device is the Treasurescope, a \$1.50 viewer for stereo slides.

Tiffen Manufacturing Corp., 71 Beekman Street, New York, which is noted for the ingenious filter-carrying devices it puts on the market from time to time, now appears with another. It is the Select-a-Filter Safe, a transparent plastic filter case with a novel push button filter selector. The case has a snap closure, molded strap loop for attaching to a case or carrying bag, holds six filters, lens shade and adapter ring, and costs \$2.50 for the Series V, \$2.75 for the Series VI size.

An improved Slavey 1-0-1 unit for firing several lamps simultaneously with the master flash has been placed on the market at \$17.95 by Sterling-Howard Corp., 561 East Tremont Ave., New York. According to the announcement, flashes can be made in any combination of strobe or flash lamps from 150 to 300 feet without interconnecting wires.

The DS surface, velvet grain natural white, high lustre in double weight, has been added by Du Pont to its list of Varigam surfaces, bringing the total to ten.

Literature

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review is published by the Library of the Research Department of Anco, Binghamton, and gives up-to-date information on photographic technical developments, literature references, new literature and patents.

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"Kodak Chemical Preparations" (50 cents), a new Kodak Data Book punched for insertion in the Kodak Photographic Notebook, contains basic information on Kodak solutions for processing after-treatment of black-and-white materials. The book includes information on the preparation of solutions; a handy chart of the most suitable materials for constructing processing apparatus; storage of solutions; time-temperature charts; keeping-property charts, and instructions on the preparation, use and storage of Kodak chemical preparations.

A twelve-page booklet that answers the most commonly asked questions on the use of auxiliary lenses is offered free by Spiratone, 32-34 Steinway Street, Long Island City, N. Y. Just drop them a card and ask for a copy.

If you're planning a trip to Europe—lucky you—this year, you may want to time your sojourn to take in one or both of two international photographic exhibitions to be held there in 1952. One is the World Exhibition of Photography, which will be held May 15 to July 31 in Lucerne, Switzerland; the other is the third Photokina International Exhibition of Photography and Cinematography, to be held April 26 to May 4 in Cologne, Germany. The Lucerne show, which has attracted, we are told, the participation of more than forty countries, will be devoted to the work of amateurs and professionals in

PSA TRADING POST

Open to individual members, free of charge. Limit 25 words each. Copy closes the tenth of the second preceding month before publication.

Trade—Rolleiflex automatic, Tessar 3.5, tripper, case, for Leica, Contax. Sell Super Ikonta C Special, 3.5 Tessar case, \$90. Max Tharpe, Statesville, N. Carolina.

TO PSA MEMBERS EVERYWHERE

FROM PAUL GIBBS, Chairman, PSA '52 Convention

AUGUST 12th through 16th are dates for you to note and remember for during that period New York City will be the host to your 1952 PSA Convention. More than 100 committee members are already busily working to make the Convention an event unmatched in both photographic importance and genuine hospitality.

New York City has been described as "The World's Largest City," "The City with Highest Buildings and Miles of Subways," "Center of World Government," "The Harbor of the Largest Ships" and many other descriptive titles of a "super" nature. Your convention committees are more chiefly concerned, however, that you will enjoy and appreciate things about our town that are of far more importance and value. We want you to know and feel the real sincerity and warmth of our welcome to the '52 Convention. We desire above all else, after the Convention is over and you enroute home, that you will take with you a feeling of having personally experienced hospitality unsurpassed.

Photographically, nothing will be left undone. The Convention program will give fullest consideration to each and every PSA Division. It will be outstanding in quality and justify your full interest.

The August dates will permit your attending without disrupting seasonal club activities and also provide you with both a new and complete menu of photographic pictures, facts and data that will give greater impetus to your plans for the home club programs during the following season. The August dates also provide greater freedom to many, who otherwise would have to remain home because of business and school sessions. August is the month of vacations and there are few places in the world that can equal New York's appeal or facilities for recreation.

You will be comfortable. Out of doors the weather will be ideal for field trips and visits to the hundreds of photogenic spots.

Indoors, the Convention will be held at one of America's famous hotels—The New Yorker. All of its public rooms are completely air conditioned and its facilities are so vast that all of the PSA Exhibitions can be displayed under the same roof with the other programs.

Above all, every effort will be made to personalize the New York Convention by catering to the needs and interests of the individual.

Do you have a transportation problem? Write us and we will supply complete information regarding your travel, whether by car, bus, rail, plane or boat.

Would you like to visit or photograph such places as the United Nations, St. John's Cathedral, Chinatown, the world-famous airports, Jones Beach, Coney Island, Rockefeller Center, the Bronx Zoo or Central Park? Notify us and it will be arranged.

Would you like to visit the "Roaring Forties," Greenwich Village, a Broadway Show, a television or radio show? Your convention committee will take care of your slightest wish. You will find them willing and anxious to be of assistance.

Yes, whatever your need, be it but a directive to the best places for shopping or the securing of a baby sitter, we will do our utmost to render truly personal service.

We urge you to make your plans now to attend. We will have a wonderful time together. You will like our town and everything possible will be done to make you feel at home. Don't forget, its

NEW YORK FOR YOU IN '52.

various fields, and will be supplemented by an extensive program including lectures, demonstrations and film shows. The Photokina exhibition is primarily a trade show supplemented by photographic and educational displays.

A new feature of the greatly enlarged quarters of Peerless Camera Stores at 415 Lexington Ave., New York, is a department for scientific and medical photographers, the first of its kind in a photography store. The department is manned by specialists in the field and the equipment on display includes a line representative of all the principal manufacturers of this type of equipment.

And just as we were winding up this shop talk an announcement came from E. I. Du Pont de Nemours and Co., Inc., of Wilmington, Del., of a new synthetic base for photographic film. "Preliminary tests by Du Pont Research," the announcement says, "show that it is several times tougher and has much greater dimensional

stability than any of the present types of film base." The base is a safety type and is less flammable than present safety bases.

The company emphasizes that the new material is still in the research stage, although five years of research and an investment of more than one and a quarter million dollars has already gone into its development. Even if it meets all tests it will take another two years or so to design and complete manufacturing facilities.

So, for the record, be it known that the material, which is intended for motion picture use, has "twice the tear resistance of the standard acetate or nitrate base film, and can be run through a projector from three to four times as long before perforations show appreciable wear." Known technically as polyester film, the material, according to Du Pont, may make it possible to reduce the thickness of motion picture film by at least 20 percent. The base is noted also for its dimensional stability and its lack of brittleness at low temperatures.

PSA JOURNAL, Vol. 18, Feb. 1952

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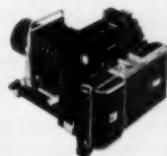
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A portrait of the author, wearing his specially-designed diving helmet.

JOHN F. STORR, M.A.*

Some Experiences in

were concentrating on photography, meant that many difficult little problems of diving had to be learned to the point of being automatic like driving a car. These included regular breathing, balancing against tide and wave motion, judging distance to counteract the magnification aspect experienced in viewing objects under water, and many others. My first photographic problem was to get the camera safely underwater and keep it dry during filming.

The Bahamas have long been both a Utopia and a

WITH ONE last admonition to Don to keep the air pump going steadily, and a warning to Bob to let me down very slowly, I popped my head into the 65-pound diving hood resting against the side of the boat, gave a signal to be lowered, and offered up a fervent prayer that these two Bahamian students of mine would follow my instructions to a "T." Thus began my first trip down into the warm crystal clear waters of the Bahamas. Some few seconds later, I was rudely jarred to a stop, and found myself seated upon the hard sand with 30 feet of water above my head. The pain in my ears was terrific. Bob's idea of slowness appeared to be rather distorted.

I gave one hard yank on the line to the helmet, the pre-arranged signal to be pulled up. Rope came down. I repeated the signal to find more rope coming my way. I started pulling it down, hand over hand, and finally discovered the main sheet of the boat in my hands. Finally, with yards and yards of rope floating above me, like a thousand ugly snakes, the line tightened and I was able to pull myself to the surface. There I found two very embarrassed boys who tried lamely to explain how they got their signals crossed. So ended the first of many, some routine, some dangerous and many humorous experiences that are attendant to taking color movies underwater.

Many problems had to be solved before it was possible for me to produce my first successful underwater color picture. One of the initial difficulties is teaching oneself how to dive properly. Everyone said it was easy, but I was soon to realize that to be safe underwater while you



The author prepares for an underwater photographic session near Nassau, Bahamas.

Valhalla for many underwater photographic experiments. Probably the most successful of these has been the Williamson photographic tube. I took one look at this huge tube, with its round sphere and four-foot glass port mounted on a barge-like boat, and realized this was not for me. My underwater spear-fishing experiences had brought me to the conclusion that the most colorful

* Instructor, Biology Department, Adelphi College, Garden City, L. I., New York.

UNDERWATER PHOTOGRAPHY

A MOTION PICTURE FEATURE

scenes could be taken in relatively shallow waters, 15 or 20 feet deep, among the treacherous coral heads within the coral reef itself. Only a small dinghy could be maneuvered in such an area and then, only in the calmest of weather.

My first serious attempt to make an underwater photographic unit was the construction of a diving bell made from part of an 18-inch cylindrical tank, equipped with three adjustable legs. With the enthusiastic support of a number of my students, some of the workmen in the shipyard, and the skepticism of the yard boss, "The Bell" at last stood proudly on its three legs, its foot-square glass port glistening, like the one-eyed giants of Sinbad's tales.

Proudly we carried its 200 pounds of weight to the end of the dock, lowered it gently (?) into the waiting dinghy, and gently again heaved it over the side. It floated serenely, its one eye still balefully gleaming. We added another hundred pounds of weight to its legs and, with a sigh, "The Bell" sank with me beneath it, my shoulders cramped within its confines. This ducking was its baptism and I believe it still stands in the shipyard waiting patiently for its second trip into the "Briny."

Following this, a series of successful photographs were taken, using a butter-box with a glass top, which was placed in the water over the side of the boat. The camera was poked into a small hole at the back of the box, and the picture snapped as interesting scenes came into view through the glass plate. These pictures were made on black-and-white film but proved to my satisfaction that color pictures were feasible and practical, as a lens opening of $f/11$ and a shutter speed of $1/50$ was used, and

the pictures had great clarity and good exposure even when objects were photographed at a distance of 30 feet.

Underwater Lighting Conditions

The other major problem to overcome was the quantity and quality of the underwater light. Getting a light meter underwater to measure quantity of light was easy. An ordinary preserving jar was fine—until I decided to take pictures at fifty feet. I felt it was then time to build a rectangular plastic case of $\frac{3}{8}$ -inch clear plastic to hold the light meter. It didn't float, was easier to manage, and gave better protection for the meter. Glass breaks too easily under water.

Underwater lighting seemed to be very unreasonable and senseless at times until I realized that there were really three sources of light to be considered. The overhead light, the sun rays refracted by waves, and those reflected from the bottom. The direct rays of the sun are absorbed by the water fairly quickly. The light rays refracted by the waves are affected in the same way. The only reason for making any differentiation at all is that near the surface the refracted rays are responsible for a brilliant lighting effect because there is not too much distance to travel through the water. The light therefore is very diffuse and strong. At fifty feet these refracted rays are ineffective and at any distance are lost entirely. Photographs at this depth show the effect of direct overhead lighting only.

On studying my first hundred or so pictures it became apparent that the most important source of light to consider was from the bottom. As a result I have limited

Two heads of TRUNK coral (*Orbicella annularis*) raise their heads to a height of six feet. This is one of the star corals and its peculiar growth often leads to the "ice cream cone" appearance. Their sides are covered with ZONARIA algae and a large YELLOW SEA FAN. This photo was taken in about 20 feet of water.

A BUSH CORAL, one of the GORGONIAS, with all the polyp animals extended has the soft appearance of velvet as it sways gently with the tide. In sharp contrast is the adjacent stark branch of a STINGING CORAL in which the polyp animals are very small.

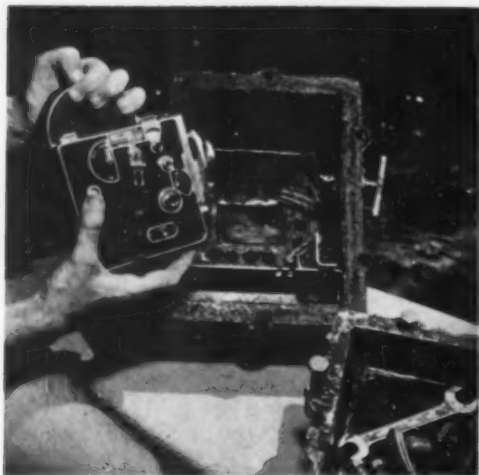
A black LOGGERHEAD or Rotten Sponge in the center is of greatest interest here. This sponge measured some two feet across. If, as a diver, you place your hand above the osculum, or opening, the powerful flow of water from the sponge can be felt. The great activity of the sponge is not often realized.



my pictures to areas where the bottom is sandy and light in color.

Several types of black-and-white film were tried but the best results were obtained with a Plus-X film and the use of a K1 and K2 filter.

Color photography presented a much more complex problem. The red end of the spectrum is quickly absorbed by the water and true color balance is impossible. I was not concerned, however, with true color balance.



A movie camera being loaded into the light-weight aluminum container.

What I wanted was an underwater photograph that looked like underwater and appeared in projection the same as the underwater appeared in real life. Besides the color of the water changes from hour to hour because of the color of the floating particles of rock and the kind and amount of plankton or minute floating plants and animals in the water. Consequently, the point of view of rendering the underwater scene in its natural condition is quite convenient. It required only one set of filters

ranging from light to pale rose. Without a filter pictures taken at a depth of over 15 feet are very bluish. With a filter it is possible to take good color pictures without a bluish cast to them at 50 feet.

About this time I had finally got it through my thick skull that light mobile equipment, with the camera encased in a water-tight box, was the answer to my need for maneuverable equipment. The first such box was made of iron sheeting welded together with a glass port inside, and a removable side plate held on by some 25 quarter-inch bolts. It took at least half an hour to set the movie camera in the case and tighten down the nuts. The less said about this first case, the better.

Next I tried a cast aluminum case of two parts, held together by six half-inch bolts. This seems to be a satisfactory answer to the problem. It was quite easily constructed and machined, low in cost and has given excellent results.

A Fascinating Business

Working underwater is a fascinating business. One really moves into a new world to be accepted quite nonchalantly after a preliminary eye-brow-raising by the underwater inhabitants. The colors and color effects are exceptional. I have never seen the coloration of the fishes, and especially the iridescence of their scales, reproduced on canvas by any painter or even by color film. Combined with these beautiful colors are the fascinating shapes of the corals and the fishes.

The area in the Bahamas where most of my photographic work has been done has been among the reef heads close to the almost unbroken barrier reef beyond which lies the open ocean. This outer part of the reef is the area where, because of the greater activity of the water, many corals live best and display their most brilliant hues. The massive coral heads and short stretches of coral reef lie behind the main barrier like a loosely fitted jigsaw puzzle. The valley bottoms between the coral heads are covered with white sand, a very necessary part of the underwater photographer's lighting system.

It is within these corridors that one has the most exciting and unforgettable experiences. I sometimes believe

TABLE OF UNDERWATER EXPOSURES

| | Bright Sunlight-Light Bottom * | | | | Hazy Sunlight |
|--|--------------------------------|-----------|-----------|--------------------|---|
| | 2-5 feet | 10 feet | 20 feet | 50 feet | |
| Black-and-White film Plus-X with K2 Filter. Movies at 24 f.p.s. Stills at 1/50th | f/16 | f/11-f/8 | f/8-f/5.6 | f/3.5-2.8 | ½ stop larger opening. |
| Kodachrome, Daylight Type with Wratten No. 86 † Movies at 24 f.p.s. Stills at 1/50 sec. | f/11-f/8 | f/5.6-4.5 | f/4-3.5 | f/2.8 at 1/30 sec. | ½ stop larger opening. No wave action seen on bottom gives unreal effect. |
| Color correction filter factor included in above | | | | | |

* Dark Bottom may require one or two stops more opening and gives poorly lighted subject.

† At greater depths (40 to 50 feet) use 86B Filter.



While roaming along the side of coral head, a small school of foot-long YELLOW TAILS (*Ocyurus chrysurus*) became interested in the strange intruder. Every few minutes the school would circle out from their coral cave, take a quick look and wander back again.

A two-foot TRUMPET FISH or PIPE FISH (*Aulostomus maculatus*) glides slowly by a large branching trunk of ELK HORN coral (*Acropora palmata*). Usually this odd sea character, a relative of the little sea horse, is seen swimming or resting head downwards among sea plumes.

A large PARROT FISH feeds upon the algal growth found on the surface of the dead coral head. A central head of coral often becomes the host to many types of growth, such as the brown BUSH CORAL, the RED FINGER SPONGE, and the STAG HORN CORAL.

that the fish are quite aware they are being photographed. On one occasion, I recall moving slowly along a rather narrow valley, and before I was able to adjust the camera on its tripod, a mixed school of brilliantly colored Rainbow and Blue Parrot glided past, weaving in and out among the over-hanging branches of coral. Being at the end of my 100 feet of air hose, I set up the camera, with a sigh of regret, to take a photograph of one solitary Nassau Grouper which was fanning himself beneath the bare arms of an Elk-horn Coral. Just as I set the camera in motion, the school of Parrot fish condescendingly wove their way back, giving me a perfect action for 20 feet of film.

On another occasion, I maneuvered into a good position to catch the detail of a particularly beautiful jutting ledge of coral. A small Yellow-tail glided back and forth, up to the moment when the camera started rolling, then, as graceful as any ballet dancer, completed a spiral motion around the very end of the ledge I was photographing. Such occasions as these occur with really wonderful regularity.

Then, of course, there is always the tale of the one that got away. In this case, it was not one, but I should judge about two thousand. I was strolling down an incline between two large masses of coral, with the camera and tripod tucked under my arm, looking about for an interesting subject. Suddenly around the corner swept some 2,000 Jack. (This is a small fish about eighteen inches long, shaped like a mackerel or tuna.) They were so closely packed that as they brushed by me, it was impossible to see either of the walls of the valley. I stood helplessly open-mouthed till the last one passed by.

These same fish gave me one of my worst frights, when a small school of fifty or so, suddenly passed, coming swiftly upon me from the rear. This is a world of silence and no horns are honked and no passing signals given, so when fast moving objects dart quickly past you without warning, it gives you a real scare.

Dangers of the Deep

This is not a perfect world, however, and still contains many dangers. Oddly enough, my greatest fear centers around a very lowly and slow moving animal. This is the Black Spiny Sea Urchin. The Urchin, or Sea Egg, as it is sometimes called, belongs to a group of animals known as the Echinoderms. To this same group belong the star fishes and the sea cucumbers. The Sea Urchin's body is slightly oval or round, and up to four or five inches in diameter. From this body with its hard casing, extend long tapered spines; these are sharp, brittle, and often poisonous. I have had the misfortune of having these spines enter my fingers on three occasions. This was sufficient to cause the sweat to break out, due to agonizing pain caused by the poison. It is interesting to note here that the prescribed Bahamian method of getting rid of the pain is to hold the affected part over the flame of a match until the pain from the burning becomes worse than the pain from the poison. It seems to work. From this description you can readily understand my fear that some day I will become too pre-occupied with the framing and taking of a particular scene and forgetfully back up into the rugged coral wall upon which these Sea Urchins often cling. Memory of the spines themselves, which are five or six inches in length, adds to the happy thought.

Some of the corals are distinctly poisonous and produce a stinging sensation. A small piece of coral, on one occasion, broke off from a piece that I was collecting high up on a coral head, and wafted down, touching my shoulder on the way. It left a welt, like the burn of a red hot poker. On another, rather embarrassing occasion, I found that one of the long twig-like stinging corals had somehow poked its way up the pant leg of the khaki shorts I was wearing. Each attempt to jump upward only resulted in my floating down again into the same unfortunate position. I walked like a cowboy for a week.

The Barracuda

As far as the fish themselves are concerned, there are only a few of which one must be wary. It is just a wee bit disconcerting to be intently photographing an underwater scene and then suddenly realize that a very healthy looking four-foot Barracuda is circling about you at a distance of three to five feet. Somehow you do not mind too much when you are able to watch him out of the corner of your eye as he circles in front, but when he disappears behind you, your heart searches for space within your throat. It is impossible to spend much time underwater without philosophizing to some degree. I found, for example, that there is a difference between knowledge and faith. When a long silvery fish with a protruding, undershot jaw, well supplied with teeth comes into view, you know that it is a Barracuda. When he circles behind you, you recall that you have heard that Barracuda never attack unless an object flashes with sudden movement. Then you cross your fingers and have faith in that knowledge. A favorite trick of the Barracuda is to stand off eight or ten feet from you, opening and closing its immense mouth. The mouth is so large, in fact, that the body of the animal entirely disappears, and only an oval of teeth, with the gullet in the center, flanked by the inside gill slits, is visible. One's imagination plays tricks, and you would swear that you can distinctly hear the clang of those teeth as they viciously come together.

During all of my diving experience there was only one occasion when a Barracuda actually made menacing passes at me. This time, two of us were diving and taking pictures. I had just finished taking a scene of the other diver climbing up the drop line into the boat, when I noticed a Barracuda at his heels. Somehow the animal sensed my desire to follow the same pathway and poised itself in the usual Barracuda manner, head-end slightly lowered, right at the end of the drop line. Any movement on my part immediately caused the fish to dash with amazing speed toward me, passing within two feet, to circle and go back to his station. On each occasion I crouched and kept the metal camera case as a rather inadequate shield between us. The use of shark repellent powder, which was lowered to me from the dinghy standing watch over me, was almost disastrous, as it was in a white bag and the shaking of the bag only excited the Barracuda more. Finally, I signalled for a spear gun, with its four-foot quarter-inch projectile of stainless steel. Letting the camera case float to the surface as the Barracuda swept toward me, I took a step forward and shot the spear into its head. Unfortunately, I missed the area of the spine which would have stunned it. Instead, the spear imbedded itself just behind the eye in the hard cartilage. The lashing of the Barracuda bent the steel spear into a complete U, and after making one swing toward me, he dashed off toward the open sea. I was missing one spear, but without regrets.

My strongest desire last year was to enter into another area of the underwater world which I had visited on only one other occasion. This was the 50-foot depth. My

reasons for taking underwater pictures is because of their great value in presenting the underwater world to biology students, as well as to the public at large. It is also an area of research for my own interest and information. The 50-foot depth opens up a possibility for contrast between the animals and plants which live in the shallow and rather unsettled depth of 15 feet, and the rather serene 50-foot depth. Here, larger and different types of fish are found.

It was during the taking of one scene at the greater depth, that a fish weighing about 50 pounds persisted in coming toward me every time I raised the camera. Through the camera finder I would see him come gliding toward me to finally disappear beneath my range of vision. I just had to look down. His nose, six inches from my bare midriff gave me a very squeamish sensation. I could not scare him away. Even striking at him with the camera case had no effect on his equanimity. It seemed impossible to make him go away. After a while, and only when he was positive that he had investigated all my diving equipment, he lazily turned away, and at that point, I believe I took my first breath in several minutes.

With fifty feet of water above you, creating on the surface of your body a pressure of 19 tons, and with the boat some 150 feet away and completely out of sight, you feel very much alone. It is, however, an aloneness that is completely fascinating. Large sultry mounds of rounded coral rise up from the smooth sand. Odd, powerfully built, and beautiful fish, swim about while the smooth waves overhead act like huge lenses to focus the sun's rays which play upon the bottom like a thousand search lights. There is so much to see and to photograph. The distance haze created by the water atmosphere curtains off one's vision at a distance of a little more than 100 feet. In and out this haze come and go the creatures of the deep. Never two scenes alike in this ever-changing world of beauty and fascination.

Johnny Appleseed's Correspondence

DEAR JOHNNY:

I wonder if either you or your associates have done any work with p-aminodimethylaniline monohydrochloride as the SOLE developing agent for black-and-white films—and with morpholine as the SOLE alkali in a developing solution intended for black-and-white negative development?

If so, in each case, what was their effect on the grain structure, the definition and general negative quality?

If you are not in a position to answer these questions, can you suggest literature where same may be consulted?

G. N. GARRISON

DEAR MR. GARRISON:

Yes, I have experimented with p-aminodimethylaniline monohydrochloride as the developing agent for black-and-white films. Compared with popular fine-grain developer formulas using p-phenylenediamine, this compound gives more graininess and equal speed losses.

Morpholine, when added to a developer like D-23, increases the development rate and the graininess.

JOHNNY APPLESEED, APSA

EXPLORATION AND DISCOVERY WITH THE COLOR CAMERA

A PSA COLOR DIVISION FEATURE

BY

HOWARD DEARSTYNE

OVER THE course of the last decade color photography has been for me both a means of recreation and, increasingly, a source of understanding of the visual aspects of nature and of the world of form generally. However simple and readily grasped certain things may, with experience, come to seem, these things are not necessarily so when one is first confronted with them. One arrives only slowly at an understanding of those profound truths which eventually appear so simple in the realm of the things of the spirit generally, and, specifically, in the world of visual art. One's eyes become fully opened to the potential beauties of nature only after years of seeing and seeking, but once they are opened they can convey to us unending "visions of pure delight."

HOWARD DEARSTYNE, Palace Green, Williamsburg, Virginia, is a registered architect and member of the A.I.A. He graduated from Columbia College, studied two years in the Columbia School of Architecture and then went to Germany to continue his studies, remaining there for the six years from 1928-1934. He studied four years at the Bauhaus, Dessau, Germany, and received the diploma of this school, being the only American to hold it. He thereafter continued his architectural studies in Berlin with Prof. Ludwig Mies van der Rohe, working with him for two years. (Mies van der Rohe is now head of the Department of Architecture of the Illinois Institute of Technology in Chicago.)

He returned to America and worked as an architectural designer for Harrison and Foulhoux, Radio City architects, for four years and also for other firms. He subsequently taught for about nine months at Black Mountain College, one and a half years at Lawrence College, Appleton, Wisconsin, where he was also resident architect and at the Cranbrook Academy of Art, where he was in charge of the Department of Design for two years. Since 1946 he has worked in the Architectural Records Department of Colonial Williamsburg, Inc., and has taught architectural design at the College of William and Mary.

He started taking photographs in the usual way, with a Brownie, as a boy. At the Bauhaus, where he came in contact with first rate artists and photographers, he began to take photography seriously and started his search for form in that medium which has continued to this day. He began his color work around 1940 and has worked almost exclusively in color ever since. He states he has no prejudice against black and white photography but finds the possibilities in color richer and more varied.

He uses a Leica camera which he bought in Berlin in 1934. His slides have been widely exhibited and a number were included by the Museum of Modern Art in its show, "New Photographers."



PAW PAW, THE SNOW-FOOTED (1945). The pressure of the dog's feet compacted the snow enough to preserve this record of his passing after the surrounding snow had melted. The dog, therefore, helped to create these footprints in relief.

The world is an inexhaustible, ever-changing reservoir of visual experiences. It does not, of course, actually change fundamentally but we do, and with our change and development the world, in effect, also changes for the reason that we come to view it differently.

One of the first things I found out in the course of taking pictures was that photographic compositions, like those in painting, must be exact or reasonably exact to give aesthetic satisfaction. The accidental, that is, that which fails to serve as a functioning part of an ordered pictorial whole, has no place in the photograph. There are no readily-determinable and conveniently-applicable rules of composition, yet every photograph must be composed or ordered in some one of an infinite number of possible ways if it is to be considered a work of art. I knew this and so I set out to make well-composed color pictures with the camera.

I soon found it expedient, in order to eliminate superfluous or incongruous elements from the picture, to isolate the particular tree branch, flower or what-not in which I was interested against a simple natural background, such as the sky, or snow, or water, or sand. The simple background enabled me better to control the forms which entered the composition and the background also contributed to the whole its color and texture and frequently certain shapes such as clouds in the sky, ripples in the water, etc.

In photographing objects against the water of a pond or lake I became aware of additional pictorial possibilities which resided in the mirror action of the water. The dark bottom of any pool, as is well enough known, makes the pool a fluid mirror in which the reflected images of clouds, trees and other objects are continually being altered or distorted. I discovered that this distortion of their images frequently rendered commonplace forms fresh

and exciting. So, I took pictures some of which were composed wholly of the distorted reflected images of objects while others were a combination of reflections and actual objects, such as things floating in the water or adjacent to it.

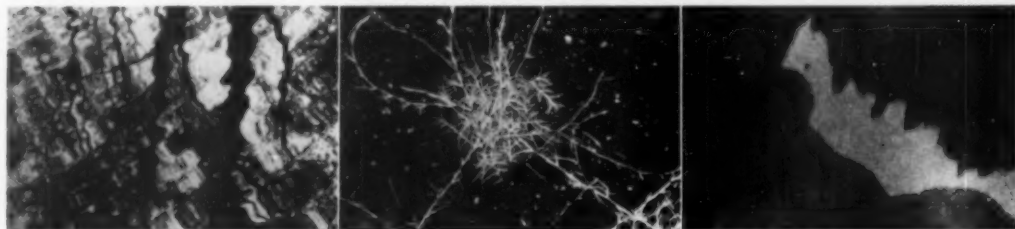
It may be well at this point to speak of reflections in general. No reflector, not even a good mirror, gives an exact reproduction of the object reflected, and most, for one reason or another, distort it more or less radically. This distortion consists in a veiling of reality which lends an intriguing sense of remoteness or mystery to a picture.

As for backgrounds, I gradually came to see that any simple natural or man-made surface could serve this purpose and that, furthermore, objects themselves can form their own background, as in the case of a composition made up, let us say, of leaves and grass, footprints in the mud, etc. And concerning subject matter I learned that anything whatsoever can constitute the raw material out of which a picture is made. There are, I discovered, no hierarchies of value in subject matter which make a beautiful girl, for instance, a potentially better subject than an old shoe or a batch of leaves on a wet pavement. What always counts most is the effectiveness of the composition of form, color and light which is achieved with the

being wrought in the things within it by natural forces—the alterations which are brought about in growing things from one season to another and the changes caused in the appearance of objects by rain, snow, wind and, above all, by lighting.

Light is a primary determinant of both the quality of the color in a picture and of its mood. As to the latter—a composition made up of any group of objects can be gay or gloomy, matter-of-fact or mysterious, rich or barren, by turns, as a result of the varying character of the light which falls upon it. Light, the source of the photograph, is also one of the chief resources of the creative photographer.

Color photography poses its particular problems and possesses special potentialities which do not exist in black and white photography. The color transparency, once it is made, cannot be altered or, at least, should not be, whereas the black and white photographer can do much to enhance the quality of the print he makes from a negative by manipulation in the darkroom. The possibilities in color photography on the other hand, are much richer and more varied. Color, of course, is one of the chief elements in composition and many a configuration of objects which in a black and white photograph would



INKY UNDULATIONS (1945) Left. A perfect mirror, presumably, would reflect a perfect image, that is, an exact copy of the object. A liquid mirror, which is far from perfect, when set in motion by the wind, transforms the image of an object or group of objects into an ever-changing series of strange and frequently grotesque forms. **CREEPING CRABGRASS** (1950) Center. There is something arresting about an inanimate object, like a stone, which suggests something living; in a plant which

has something animal-like about it, and in either when it takes on some human aspect. This is pictorial poetry and it is, in a general way, equivalent to literary devices such as metaphor, simile, the parable, etc. **ABSTRACTION ON CONCRETE** (1945) Right. The dictionary defines "abstraction" as the concentration of attention on some one aspect of an object to the exclusion of all others. Here the identity of the subject matter is cloaked so that we are aware only of its form.

subject or subjects employed. Each subject, of course, impresses its particular personality upon the picture and makes it unique over against all other pictures. But the fact that both a good and satisfying photograph and a bad and unsatisfactory one can be made of either the beautiful lady or the old shoe suggests that factors other than subject matter determine to a large extent the aesthetic quality of the result.

From this it follows that one need not journey to some distant photographic happy hunting ground to find suitable and satisfying subject matter. There is as much potential beauty at one's doorstep as in the grandiose Rockies or in exotic Tahiti. If one searches this beauty out, he will find that the small fragment of the world which lies within easy reach of his hearthstone is a rich storehouse of pictorial compositions which is ever replenished by changes in form and color which are constantly

lack sufficient interest becomes exciting and satisfying when recorded in color. Light, again, plays a vital role here. It has the power of altering both form and color so drastically as to justify our asserting that, in respect to our perception of these, there is no such thing in nature as a constant form or a stable color.

It has been my experience that bright sunlight, far from augmenting color, definitely fades or weakens it. I make many of my pictures in the early morning or toward evening when sunlight takes on a mellow, rosy hue which lends warmth and richness to the picture. I make many color shots in the shade or partial shade where the subject is illuminated by reflected light, which is much less harsh than the direct rays of the sun, and many, also, on cloudy days or in the rain where the colors of things are saturated and most satisfying. I have discovered that the only disadvantage of rain is the discomfort it visits on the

photographer—it is certainly kind to the color picture. A word of caution should be given here concerning the use of strong contrasts of sunlight and shadow—these are very difficult to handle successfully in color photography.

One further important characteristic of color photographs should be noted—their ability to portray the third dimension. Color pictures give a far greater impression of depth than black and white, because, probably, they approach reality more closely—our world is, after all, a colored world. The photographer, however, must make judicious use of this advantage. The photograph, to rise above the realm of decoration must, indeed, create the illusion of the third dimension, yet the depth represented should be a limited one. I judge this from the fact that the best of my pictures are invariably restrained in their three dimensionality.

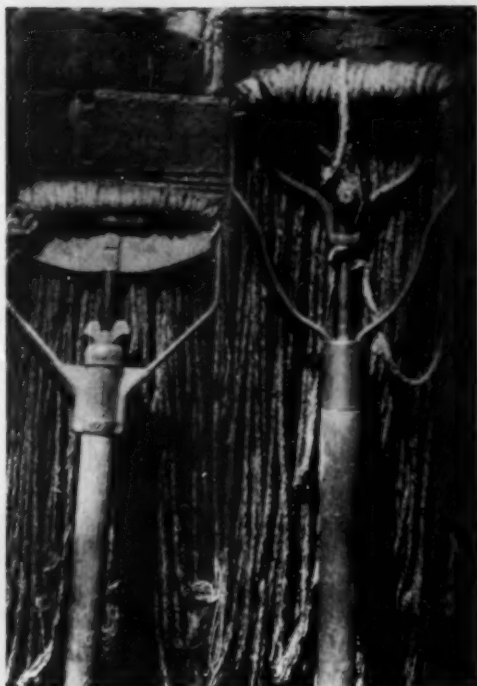
Photographs, I now know, are most successful when they are precise in detail—soft focus, impressionistic effects are a natural province of painting, not photography. The virtues peculiar to each technique must be exploited to their fullest to produce with each the best result. The camera is capable of achieving an exactness



SANDPIPER'S MUD LARK (1950). This is scarcely an abstraction. The perambulating bird is still very much present in its tracks. The thing or things called to mind by the forms, the mental image evoked, though less definite than the actual image, is an integral part of the experience we have in viewing a picture such as this.

of recording which the painter can never hope to obtain. The ability of the photograph to present the full reality of objects in the world roundabout is one of its outstanding merits for, when the photographer chooses significant combinations of objects, colors and lighting, this reality can be surpassingly beautiful.

It is remarkable what framing a potential picture in the viewfinder of the camera does to the objects thus framed. First of all, it segregates these objects from their surroundings and enables the operator of the instrument to choose with far greater certainty those arrangements of forms, colors and light which will produce satisfying pictures. This enframement concentrates the attention upon a relatively few objects so that the photographer sees them fully, perhaps, for the first time. Furthermore, cut off from their surroundings as they are by the viewfinder,



STRINGY-HAIRED MOPPETS (1951). This picture depends upon suggestion for its chief interest, rather than on form. There is a feeling of something grotesquely human in the mopheads which gives them a whimsicality which a pair of actual human figures would not have.



SHADOW OF THE THIRD WHEEL (1946). In a picture light and shadow forms mingle on a more or less equal footing with real objects—all are the potential raw materials of pictorial compositions. An actual object, such as this tricycle, will generally dominate over the forms created by light since the object has three-dimensional solidity and greater detail, while light forms and shadows are two-dimensional and flat.



STAVED SUSPENSION (1950). The interest in this picture resides primarily in a sense of physical forces at work in it. The snapping of the stem, first of all, is still recalled in it. Then, we can readily imagine the broken stem, blown back and forth by the breeze, inscribing the series of arcs on the soft tarpaper background. Finally, the grass head hangs downward like a weight suspended from a crane (the diagonal part of the stem) and a guy (the shadow) stays or supports the latter.

these objects cease to be so much parts of the actual world as dynamic and living entities in a distinct and self-sufficient new world—the world of the picture. The taking of the photograph thereafter serves only to record the picture which the photographer has already singled out.

In the selection of the materials of the composition the manner in which the objects are "cut off" is most important both to the composition and to the affective power of these objects. Things which as wholes are not arresting frequently become so when some well-chosen part only is included within the bounds of the picture. Furthermore, an object normally vertical, like a building or a tree, often takes on added interest in the picture when it is inclined, so that I very frequently tilt the camera in taking a picture.

It is most instructive, in training the viewfinder on first one and then another group of objects, to observe the divergent character of the pictures which are thus isolated. All phases of art seem here represented, from realism and impressionism through expressionism, surrealism, abstraction, etc. Nature sometime, somewhere produces combinations of forms and colors akin to all of those found in the most radically modern paintings—a fact which, were it generally known, would tend to silence the absurd, unceasing disputes concerning the validity of one or another of the various forms of modern art. If surrealist forms, abstractions, etc. abound in nature, how is it possible to object to them in painting on the ground that they are unnatural and illegitimate? It is manifestly impossible to place the stigma of falseness and corruption on Dame Nature, the mother of all things, animate and inanimate, and the ultimate source of all pictorial ideas and ideals. At any rate, the so-called eye of the camera is an impartial, unprejudiced eye and sees at every turn things which to many seem shocking or ridiculous the moment they appear upon the canvas. The camera, indeed, can be a powerful agent in the emancipation of the vision and can unlock many of the secret doors of art.

The Stereoscopic Art—Part 4*

J. A. NORLING, APSA

GENERAL DATA

For successful stereoscopic projection, it is important to know the size to which the picture is to be projected, for upon this knowledge depends comfortable viewing or maximum effectiveness, or both. Distortion of the subject for the spectator depends on his viewing distance and the angle at which he views the picture, but as in conventional movies, distortion due to the spectators viewpoint is not serious unless he is very far off screen center or extremely close to or very far away from the screen.

Stereoscopic Terms

There are certain terms used in stereoscopy. These are:

The Stereoscopic Window

The "frame" behind which the scene apparently exists in space. In some cases, elements of the scene may extend in front of the window. These are special effects, and do not belong in a discussion of basic principles. The symbol is Sw.

Interocular (I_o)

The distance apart of the human eyes. We may select 2.5" as the interocular.

Interaxial (I)

The distance apart, or horizontal spacing of the stereo

* Concluded from page 25, January 1952 PSA JOURNAL.

camera lenses, more truly the spacing apart of the central axes of the picture area.

Major Distance (D)

The distance from the lenses to the farthest object.

Minor Distance (d)

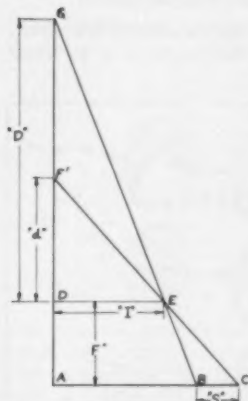
The distance from the lenses to the closest object. This is often the plane at which the stereoscopic window is planned to exist. In most cases, the nearest object will be a slight distance in back of the nearest plane.

Width of Image (w)

Refers to the width of that part of the negative which is to be used in the final prints. For standard 35mm theatrical film, this is .825", for 16mm—.4", for Stereo-Realist slides—.875".

Focal Distance (F)

Refers to the distance from the principal node of the lens to the film, and does not refer to the equivalent focal length of the lens, although in most cases the stated focal length may be considered the focal distance. It is only for extreme close-ups that a differentiation must be made.



The geometry of the stereoscopic process.

Parallax Index (P)

This refers to the parallax difference between separate members of the stereoscopic pair when projected. The parallax difference is determined by the following factors:

1. The distance to the nearest plane in the subject.
2. The distance to the farthest plane in the subject.
3. The ratio between image width and focal distance of the lenses used.
4. The interaxial used.

Parallax index can be expressed by the equation

$$P = \frac{W}{PF} \times \frac{Dd}{D-d}$$

This equation was derived from the accompanying diagram, which represents the geometry of the system of taking stereoscopic photographs. Calculations are simplified if we consider one of the lenses collinear with the far and near points.

Points D and E represent the positions of the two lenses. The distance DE is the interaxial "I". Distance

DA or EA is the lens to film distance, and its symbol is "F". F and G are points on the nearest and farthest planes in the subject. DF is "d" and DG is "D". BC is the horizontal shift on the image plane created by points F and G, and this distance has the symbol "S".

It will be seen that if the nearest point is superposed on the screen that the farthest point will be separated by an amount determined by the interaxial used in taking the picture. The maximum value of the distance of homologous points on the screen should not exceed 2½ inches to avoid visual discomfort. To the observer, homologous points back of the stereoscopic window which are 2½" apart should appear to be at virtual infinity. Some individuals can tolerate 3½ to 4 inches, but it is best not to use "super infinity" if it can be avoided. Homologous points that superpose on the screen will seem to lie in the plane of the stereoscopic window.

The minimum distance at which observers can look at a picture comfortably when it has a 2½" maximum separation of points is about six feet. In general, the maximum horizontal displacement should not exceed 1/30 of the viewing distance. This requirement exists because in viewing projected stereo pictures, the observer must "uncouple" the facilities of convergence and accommodation of the eyes.

In viewing, it is desirable that the parallax index be 24 or greater.

Parallax index P may be stated as

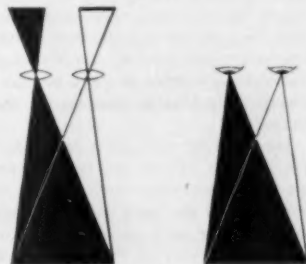
$$P = \frac{D_r}{I_n}$$

where D_r is the viewing distance, and I_n is 2.5".

Thus where $D_r = 60"$, $P = 24$; where $D_r = 120"$, $P = 48$, etc.

General Rules

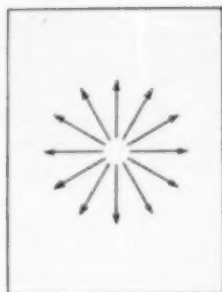
1. A general rule can be laid down for the photography and projection of stereoscopic views: *The projected view should have the same angular dimension for the viewer as*



The principle of lens angle and viewing angle.

the scene taken by the camera. This is the ideal, but never attainable in practice except for just one person at the prescribed distance from the screen and viewing the screen along the projection axis.

2. The apparent depth of the stereoscopic view should be the same as the real depth of the scene. To attain the right apparent depth, the correct interaxial must be employed. The required interaxial varies over a wide range and for projected views must be given much more serious consideration than for hand-held views. If we plan to



Representation of a cluster of light vibrations.

project on an 18 foot wide screen, we must not use as wide an interaxial as we can use on a six foot screen, because if we do, and employ convergence to establish the stereoscopic window, we are either going to have homologous points at infinity spread so far apart that the eyes have to diverge to accommodate for them, or we are going to have to adjust the projected stereoscopic window to a plane far in front of the screen.

It is not difficult to arrive at the correct interocular if we use the simple equation

$$I \text{ (interaxial)} = \frac{w e d}{s f}$$

where w = width of the image on the film,
 e = normal human interocular ($2\frac{1}{2}$ ")
 d = distance from the camera lens to a plane just in front of the nearest object (plane of convergence),
 s = width of the projected picture,
 f = focal length of the camera lenses.

The establishment of the stereoscopic window is not of great importance in hand-held views, but it must be employed in projection, and properly employed. If it is not, there will be the marginal disturbances that have been mentioned before, and they are hard to look at. There is nothing in natural vision to correspond to them, and since the ideal stereoscopic view is one that should afford *complete visual comfort*, the appropriate window frame should be calculated in every scene. If it is not, people may have trouble looking at your stereoscopic "masterpieces."

Very striking stunt shots can be made stereoscopically. For instance, objects can be made seemingly to float in space between screen and observer provided the object is well inside the margins of the picture areas. Objects should not be photographed so as to appear so near to the person observing the projected images that he will have trouble fusing them. Consideration must be given to the accommodation limits of the eyes; that is, for convergence accommodation limits.

Theoretical accommodation limits of the human eye in convergence are based on normal close reading distance of 15 inches. (Note: This formula does not take into consideration what physiological effect, if any, is introduced when the accommodation muscles are used without correlative focusing.) The angle of convergence of the eyes (interpupillary distance of 2.625 is used) at a distance of $16\frac{1}{2}$ " is slightly more than 9° . The displace-

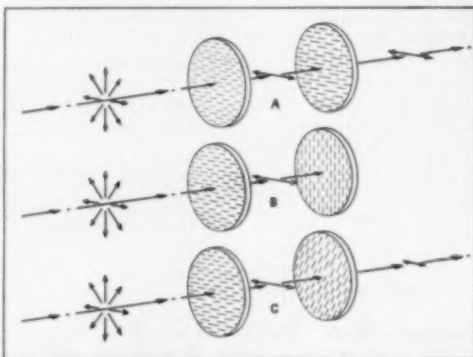
ment of the disparate images on the screen are given in inches and decimals of an inch.

Formula: Observer distance from screen less 15" multiplied by the tangent of half the angle subtended by the eyes gives the maximum separation on the screen at a given distance. To obtain the required separation of images on the film, divide the projection aperture width by the screen width and multiply by the separation of the projected images. ($\tan 4^\circ 30' \times$ distance from the screen)

| Observer distance from screen. | Maximum separation on screen in inches. |
|-----------------------------------|--|
| 4' | 2.60 |
| 6' | 4.48 |
| 8' | 6.37 |
| 10' | 8.26 |
| 12' | 10.15 |
| 16' | 13.93 |
| 20' | 17.71 |
| 24' | 21.48 |
| 30' | 27.15 |

An Analysis of Light Polarization

Since the phenomenon of light polarization is so closely related to the practice of stereoscopy, it is of benefit briefly to review it.



Light passing through two plane polarizers: A—with axes parallel, B—with axes at 90° to each other, C—with axes at less than 90° .

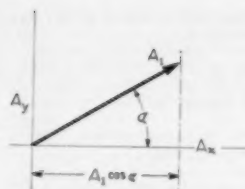
Let us imagine we are looking head-on at a beam of light and that we can conceive it as a bundle of rapidly vibrating arrows pointing outward in an infinite number of directions. A polarizing filter can cause all vibrations to take place parallel to each other.

The polarizer transmits not only the vibrations which are originally parallel to the polarization axis, but all the components of all the infinite number of vibrations at angles to the axis. The amplitude of any vibration along the axis is equal to

$$A_1 \cos a$$

where a is the angle between the direction of vibration and the axis.

Since the energy of a vibration is proportional to the square of its amplitude, the relative intensity I_a of light



Vector diagram of a vibration.

transmitted by two polarizers with axes at any angle from 0° to 90° is given by

$$I_a = I_0 \cos^2 \alpha$$

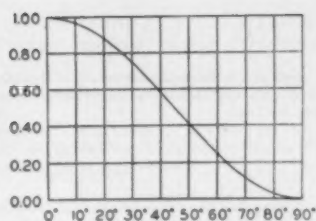
when the angle between the polarizing axis is α and I_0 is the relative intensity of the transmitted light when the angle α is zero.

A graphical representation of this, with I_0 arbitrarily equal to unity, shows the relative intensity of the light through two polarizers with axes at various angles to each other. This curve is true only for perfect polarizers which would have a transmission of 50%. Actually, the best polarizers have a transmission of only about 40%.

Conclusion

The fundamental requirement of any stereoscopic

Relative transmission of light through two polarizers arranged with axes at angles to each other, from 0° to 90° .



system is that each eye sees only that member of the stereoscopic pair intended for it and excludes the image belonging to the other eye. The disparate images of the stereoscopic pair must be distributed to the eyes of the audience in a selective manner. To quote from Dr. H. E. Ives:

There are only two places where the distribution of images to eyes can be done; these are at the screen and at the eyes. The number of images at the screen can be reduced to two, if the number of viewing instruments is equal to the number of spectators. The number of viewing instruments can be reduced to zero if the number of images at the screen is made infinite. Any gain in simplification at one point is offset by increase in the complexity or expense at the other.

Camera Club Manual

H. J. JOHNSON, FPSA

CONTINUING with the revision of the Manual, the second chapter brings a sample constitution which, though it can be used successfully "as is" by many clubs, is intended chiefly as a framework which may be adapted to the particular requirements of any club.

There are two important points in connection with club constitutions: (1) they are not absolutely necessary; (2) their chief value is to fix dates, duties, etc., rather than to prevent politics. Club politicians never let constitutions hinder them unduly.

Chapter II

Camera Club Constitution and By-Laws

The constitution and by-laws of the camera club comprise the formal ground rules by which the officers of the club guide its operations. They serve as reference documents to be followed in spirit rather than observed by exact letter. Their greater use is less for discussion than as the final recourse in cases of doubt or controversy.

No one example of constitution and by-laws can be satisfactory for all clubs. The samples which follow may be regarded merely as patterns found satisfactory by club experience. They may be adapted to the needs of individual organizations.

The democratic principles by which every camera club

should conduct its affairs demand that provision be made for amending the constitution and by-laws as established circumstances dictate, and in answer to the requests of the members. Under ordinary conditions, however, such amendments will not be frequent. Club officers must distinguish between cases of actual need and those sometimes disputatious and arbitrary efforts to effect change for its own sake. On the other hand, the constitution and by-laws should not be permitted to handicap the progress of the club.

CONSTITUTION AND BY-LAWS OF THE CAMERA CLUB

Article I

NAME

The name of this organization shall be the Camera Club.

Article II

OBJECTIVES

The objectives of this club shall be:

1. Association for the mutual enjoyment of photography.
2. Encouraging the advancement of members in the knowledge and practice of the science and art of photography.
3. Making mutual contributions to the progress of photography.

Article III
MEMBERSHIP

Any person active or interested in the practice of photography may make application for membership in this club as provided in the By-Laws.

Article IV
OFFICERS

Section 1. The officers of this club shall be a President, a Vice President, a Secretary, and a Treasurer whose duties shall be those customarily pertaining to their respective offices.

Section 2. The executive body of this club for the general guidance of its operations and the transaction of official business, subject to the approval of the membership, shall be an Executive Committee.

Section 3. No officer or committee chairman shall serve more than two consecutive terms of office.

Article V
VACANCIES

Section 1. If the office of President temporarily shall for any reason become vacant, the duties shall be assumed by the Vice President.

Section 2. If any office other than that of President temporarily shall become vacant, it shall be filled by appointment by the President, but for no longer than the remainder of his term.

Article VI
MEETINGS

Section 1. Regular meetings of the club shall be held at such times and in such places as may be decided by the Executive Committee.

Section 2. Special meetings of the club may be called at any time by the President, or by the President upon written request of not less than members, or by the Executive Committee.

Section 3. The Annual Meeting of the club shall be held in the month of at a place to be designated by the Executive Committee and all members shall be given, at least one month in advance of meeting, official notice (1) of time and place of meeting and (2) of official business to be transacted.

Note: Many clubs prefer more frequent business meetings, open to all members. So far as possible, these should be held separately from regular program meetings.

Article VII
AMENDMENTS

Section 1. This Constitution may be amended at any Annual Meeting of the club upon affirmative vote of two-thirds of the members, provided (1) notice of intentions to amend the Constitution and (2) notice of the nature and purpose of proposed amendments shall have been given to members at least one month in advance.

Section 2. The By-Laws may be amended, adopted, or revoked, in any manner not in conflict with the provisions of the Constitution, by an affirmative vote of a majority of the members of the club at any regular meeting, provided notice of (1) intentions to amend, adopt, or revoke and (2) notice of the nature and purpose of proposed action shall have been given to members at least one month in advance.

Article VIII
QUORUM

Section 1. A quorum of the membership at any regular meeting shall consist of not less than one-quarter of the members.

Section 2. A quorum of the membership at any Annual Meeting shall consist of not less than one-third of the members.

Section 3. A quorum of the Executive Committee at any meeting

for the transaction of official business shall consist of not less than one-half of the Committee's membership.

Article IX
FISCAL YEAR

The Fiscal Year of the club may be any appropriate period of 12 months selected by the Executive Committee.

Note: The most frequent period is that fitted to the camera club "season", in which the greatest activity is Sept.-June.

Article X
APPROVAL OF CONSTITUTION AND BY-LAWS

This Constitution and these By-Laws shall be regarded as officially adopted upon their approval by a vote of not less than two-thirds of the total members in good standing.

BY-LAWS

Article I
NOMINATION, ELECTION, AND INSTALLATION OF OFFICERS

Section 1. Officers shall be elected by majority vote of members present at the Annual Meeting and using official written ballots provided by the Secretary.

Section 2. Candidates for office shall be selected by a Nominating Committee appointed by the President at least two meetings in advance of the Annual Meeting.

Section 3. The Nominating Committee shall consist of members of the club who are neither officers nor candidates for office.

Section 4. The Nominating Committee shall prepare a full slate of candidates for offices at a special committee meeting which shall be held separately from any regular or special meeting of the club or Executive Committee and which is attended by no officer of the club.

Section 5. The Nominating Committee shall report its slate of candidates to the club at least one meeting in advance of the Annual Meeting.

Section 6. Ballots prepared by the Secretary shall be distributed, collected, and tabulated at the Annual Meeting by a Tabulating Committee of three appointed from the membership of the club by the President.

Section 7. No member of the Tabulating Committee shall be an officer of the club or a candidate for office.

Section 8. Results of the balloting shall be announced by the chairman of the Tabulating Committee as soon as tabulation is completed and not later than the close of the Annual Meeting.

Section 9. Newly-elected officers shall be installed at the Annual Meeting and shall assume the duties of their respective offices at the close of the Annual Meeting.

Note: Most clubs provide also for petition or floor nominations, requiring that previous agreement of the nominees be obtained.

Article II
DUTIES OF OFFICERS

Section 1. The President shall preside at all meetings of the club and of the Executive Committee; shall appoint the chairman of all Standing Committees; shall appoint the chairman and members of all Special Committees; shall, when properly authorized by club or Executive Committee, sign all written contracts or obligations of the club; shall function as ex-officio member of all committees; shall officially represent the club at meetings of other organizations; shall make a report at the Annual Meeting of the progress of the club under his administration, with recommendations for the coming year; and shall carry on the duties of his

office in such a way as to promote the effective operation of the club.

Section 2. The Vice-President shall perform the duties of the office of President during the absence of the President or during a vacancy in that office; shall be a member of the Executive Committee; and shall perform such other duties as the club may direct.

Section 3. The Secretary shall be a member of the Executive Committee; shall keep the minutes of meetings of the club and of the Executive Committee; shall keep and be custodian of the records of the club; shall conduct the club's correspondence; and shall perform such other duties as the club may direct.

Section 4. The Treasurer shall act as custodian of all club funds; shall render bills for dues and acknowledge their receipt; shall, in cooperation with the secretary, provide members with official membership cards; shall pay bills as directed by the President or Executive Committee; shall keep club funds in a bank approved by the Executive Committee; shall keep an account of all receipts and expenditures; shall make a semi-annual written report to the club of the condition of the treasury; and shall perform such other duties as the club may direct.

Section 5. Additionally, the Treasurer, with two other members of the Executive Committee appointed by the President, shall constitute a Budget Committee which shall prepare an annual budget for the club and shall submit it to the Executive Committee in advance of the first meeting of the year. The budget shall be submitted by the Treasurer to the members at the first meeting of the year and, upon approval by the members, shall serve as a financial measure of the club activities during the year.

Article III

COMMITTEES

Section 1. The President shall, in advance of the first meeting of the year, appoint the chairmen of the following Standing Committees, who shall be members of the Executive Committee:

Membership and Reception Committee
Exhibition and Contest Committee
Program and Activities Committee
House Committee
Publication Committee

Section 2. The members of Standing Committees shall be selected by their respective chairmen.

Section 3. The President shall appoint such Special Committees as needs may require.

Article IV

DUTIES AND FUNCTIONS OF COMMITTEES

Section 1. It shall be the duty and function of the Executive Committee to carry on the routine business and to guide the activities of the club in such a way as to relieve members of such responsibilities and so far as possible to eliminate the necessity for transacting business at meetings other than those specified for that purpose.

Section 2. The Executive Committee, through the President, shall keep the membership informed of the club's financial status, business affairs, and other undertakings, and shall welcome expressions of opinion by the membership.

Section 3. The Executive Committee shall meet, or at the call of the President, or at the request of any three members.

Section 4. The Membership and Reception Committee shall promote the membership growth of the club, shall welcome guests at meetings, shall act upon applications for memberships, and shall perform such related duties as may be necessary.

Section 5. The Exhibition and Contest Committee shall conduct such print, slide, movie, and other contests within the club as the Executive Committee may direct, shall encourage and facilitate the participation of club members in photographic exhibitions, shall direct all club exhibitions, and otherwise shall promote club activities.

Section 6. The Program and Activities Committee shall, with the approval of the Executive Committee, develop such programs for meetings and other activities as satisfy the needs and pleasures of club members.

Section 7. The House Committee shall have charge and custody of all property of the club, shall make all arrangements and preparations for meetings, and shall perform such other duties as the Executive Committee may direct.

Section 8. The Publications Committee shall direct the preparation and distribution of all club publications as instructed by the Executive Committee.

Section 9. Each Standing Committee may, with the approval of the Executive Committee, establish such sub-committees as may be necessary to carry on related activities.

Article V

MEMBERSHIP

Section 1. Any person interested or active in photography may make application for membership in the club.

Section 2. Official membership application blanks shall be provided by the Membership and Reception Committee.

Section 3. Applications for membership, made out in full and accompanied by deposit of an amount equivalent to one year's dues, shall be received and acted upon by the Membership and Reception Committee.

Section 4. Applicants for membership shall be notified by the Secretary of their acceptance or rejection. In case of rejection, the Secretary shall return the financial deposit accompanying the application.

Section 5. Applicants for membership who are rejected may appeal in writing to the Executive Committee, decision of which shall be final.

Section 6. Requirements for membership, classes of membership, dues, initiation fees, and other costs of membership shall be established each year by the Executive Committee, subject to approval by club membership.

Section 7. No member may resign or be removed from the membership rolls unless and until club property in his possession is returned.

Section 8. Members who shall be in arrears two months in payment of dues shall be notified by the Secretary, and, unless payment is made within one month, shall be notified of the cancellation of membership.

Section 9. Any member whose membership has been cancelled for cause shall make application for new membership as provided in these By-laws.

Section 10. Termination of membership shall operate to relieve all right, interest, or title of any member to property, assets, and privileges of the club.

Article VI

TERMS OF OFFICE

Section 1. Officers of the club shall hold office only for one year, unless re-elected.

Section 2. Terms of office of chairmen of committees and of those appointed by the President shall expire with the term of office of the President.

Article VII

APPEALS

Any member of the club who may find cause for dissatisfaction with its operations may appeal in writing to the Executive Committee. The Executive Committee's decision shall be final.

Article VIII

EXHIBITION

Section 1. The club shall hold each year, at the discretion and direction of the Executive Committee, a competitive or invitational exhibition.

Section 2. This exhibition shall be conducted by the Exhibition and Contest Committee.

Section 3. This exhibition if competitive, shall be conducted in accordance with the regulations, and recommendations of the Photographic Society of America.

Article IX

AFFILIATION WITH OTHER ORGANIZATIONS

Section 1. This club shall be affiliated with the Photographic Society of America, and the Treasurer, without further authoritative instructions, is authorized to obtain and to maintain such membership, paying all required dues and fees.

Section 2. This club may become affiliated with any other organization active in the field of photography upon majority vote of the membership.

Article X

DEFINITION

Section 1. The term "member," as used in the Constitution and By-laws of this club, is interpreted to mean member in good standing.

Section 2. The term "officer," as used in the Constitution and By-laws of this club is interpreted to mean a person elected to office.

Section 3. The term "chairman," as used in the Constitution and By-laws of this club is interpreted to mean a person appointed to office by the President as chairman of a Standing or Special Committee.

Article XI

ORDER OF BUSINESS

Section 1. The order of business for regular and special meetings of the club shall be as prepared or directed by the President.

Section 2. The order of business for the Annual Meeting shall be as follows:

1. Reading of minutes of prior Annual Meeting.
2. Reports of:
 - a. President
 - b. Treasurer
 - c. Chairmen of Standing Committees
 - d. Chairmen of Special Committees
3. Transaction of routine business
4. Report of Nominating Committee
5. Nominations from floor
6. Closing of nominations
7. Distribution of ballots
8. Voting
9. New business
10. Report of Tabulating Committee
11. Installation of new officers.

Article XII

CONDUCT OF MEETINGS

Conduct of all meetings shall be governed by Cushing's "Manual" or by Roberts' "Rules of Order" insofar as they are applicable to and consistent with provisions of the club's Constitution and By-Laws.

Local Conditions Govern . . .

The newly-organized, or even the established camera club, may find many provisions of this sample camera club constitution and by-laws unsuited to its type of organization, objectives, operations, or circumstances. In such cases the suggested provisions may be altered to suit local conditions.

Some camera clubs have many more officers than herein indicated. In some cases, the chairmen of standing committees are vice presidents. In other cases, provision is made for plural vice presidents to permit of wider representation of club membership in the governing group.

However the club prepares these official rules, it will be found that club activities proceed more smoothly and successfully when placed in direct charge of an elective

governing board, such as an Executive Committee or Board of Directors, than when matters are left to vote of the membership at open meetings. Action upon business at meetings other than specified business meetings consumes considerable time, seldom reflects considered action, and constantly burdens club members with routine business which necessarily detracts from enjoyment of club meeting programs and of photography.

Some clubs have additional Standing and Special Committees. The necessary number of such committees is governed largely by the extent of the club's activities. Usually, it is more satisfactory to assign responsibility for each major activity to a different committee so that the chairmen may select as members of the committee those members of the club who, through personal interest or experience, best can promote the activity. This method of organizing also permits more members of the club to be members of committees, an objective which assures an active, healthy club, wide sharing of responsibilities, and good training for future club officers.

Democratic Organization . . .

The average club will find that the ideal situation is that which permits club management to have the widest latitude of control under constitution and by-laws, encourages the broadest possible member participation in committee work and other responsible club activities, keeps all members fully informed of the club's affairs, and assures effective and efficient direction without causing any real or fancied suspicion of rule by dictatorship or rule by clique.

Every club frequently is tempted to keep in office those officers who render outstanding service and demonstrate administrative talent, but two terms in office, the limit provided by the sample constitution, should give the club the full benefit of administrative talents and represent all the time for club affairs which a member reasonably may be expected to give.

Clubs frequently will find it the desire of their members to elect to office those who may possess outstanding talents for photography, but whose administrative capacity is inadequate. This problem is one which each club must solve in its own way. Generally speaking, it may be said that so far as club welfare is concerned, successful administration of the club's business is paramount to success in producing photographs.

No club will find that its constitution, by-laws, or management will be entirely satisfactory to all members. Every club is likely to have some members who are chronically dissatisfied or inherently disputatious, yet who, while critical of the conduct of others, have only limited abilities of their own. This problem in human relations may be handled with as much patience and diplomacy as possible. It is likely to be a persistent headache resisting all attempts at cure or correction, and customarily ends only with the resignation of the protesting member. Isolated cases of this type are normal and reflect no failure of club management. On the other hand, wholesale member dissatisfaction may be accepted as certain indication of conditions requiring immediate correction.

(TO BE CONTINUED)

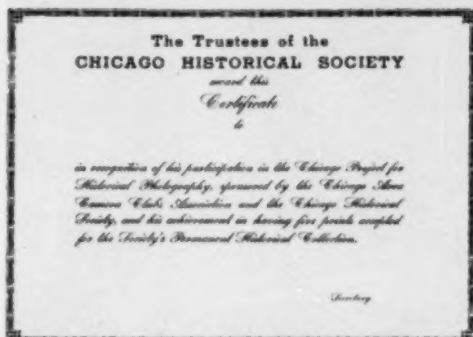
PSA JOURNAL, Vol. 18, Feb. 1952

IT IS FUN to make pictures of the baby, Aunt Agatha and Cousin Clarence. For some it's fun to see our pictures hung in the exhibitions. But many Chicago photographers are finding satisfaction in recording current scenes on photographic paper for the benefit of future generations, as well as for others in this generation who may not be as observant of our present ways of life.

Under a project sponsored by the Chicago Area Camera Clubs Association, more than 1,000 prints have been added to the permanent files of the Chicago Historical Society in the past two years by members of the clubs. These pictures are for the use of writers and authors, now and 100 years from now, with credit given to the photographer and to the Society. The prints are also being used for exhibition purposes.

Recognition and Awards

Besides the satisfaction of using our hobby to contribute to an institution of civic importance, there are interesting material awards for those who participate in the Historical Project. Each year the photographer who has had the most acceptances receives a trophy. Another goes to the camera club whose members have had the greatest number of acceptances. When any photographer



8x10 prints of any of some 200 negatives he shot at the 1933-34 Chicago World's Fair. Fifty were requested.

Currently photographed scenes that have been added to the archives include among other buildings, residences, churches, hospitals, schools, theatres, stations, banks, bridges and libraries. Here again there are two general classes. There are the old homes and public buildings dating back two or more generations and which are rapidly

Photography for Fun, and for the Future

DR. FRANK E. RICE, APSA *

has had five prints accepted for the archives, he receives a *Certificate of Recognition* from the Trustees of the Chicago Historical Society. When 25 accepted prints have been contributed, a medallion is awarded; and, when the 75 mark has been passed, a specially engraved plaque is given together with a membership card in the Chicago Historical Society.

Subjects Covered

Most of the pictures contributed are of scenes photographed currently. However, a number of contributions have been from negatives that were made years ago. For instance, J. Sherwin Murphy, of Jackson Park Camera Club, has a file of negatives exposed before World War I, a number showing airplanes and other items of that era. D. Ward Pease, FPSA, of Fort Dearborn, offered to make

being destroyed; then there are those that are typical of present day architecture.

Typical interiors of homes, offices, schools and factories are especially desired. And Chicago has some slum areas too which are included in the collection.

Aerial photographs, shot from planes or high buildings are always good when sharp. Thus the photographer becomes a map-maker of present day layouts.

Activities of all kinds are acceptable: parades, celebrations, sports, expositions and typical street scenes. Equine-mounted police in Chicago went out only a few years ago, but some of our local photographers had good negatives of them. Pictures of people at play, at work, and going about their business are especially needed. Remember how styles in everyday clothes as well as bathing suits are changing! Some farm scenes have been sent in but not enough. Farm equipment changes almost as fast as bathing suits, as does also methods of transportation, automobiles, street cars, streamliners and planes.

Mr. Paul M. Angle, Director of the Chicago Historical Society, has suggested that "we keep in mind the desirability of recording for future generations pictures of how this generation lives." That indeed is the goal of our Historical Project.

The Chicago Area Camera Clubs Association has clubs

Outline of a project
of community service
that can be undertaken
by any club or council

* Chairman of the Chicago Project for Historical Photography.



JUDGING THE PRINTS — HISTORICAL PROJECT
Mildred Mead, Jackson Park Camera Club, Chicago Historical Society File.

in its membership from lower Wisconsin and upper Indiana. The Historical Society's interests go just as far. All clubs in the Association can participate by entering pictures taken locally. The Gary (Indiana) Photographic Society has entered a large number of photographs made in that city. It happens that the Gary club has a "Face of Our City" project of its own, which ties in well with the CACCA Historical Project.

And we do not forget that camera club activities are interesting and important in the present generation. The Historical Society's file has a number of pictures of field trips, studio nights and such.

Mechanics of Handling the Project

Publicity concerning the Historical Project is sent to the 60 clubs in the area at intervals. It consists of material for bulletin boards and for club publications. The CACCA *News* is supplied with copy for every issue, reminders of forthcoming deadlines, and reports of recent judgments. R. L. (Bob) McIntyre, Camera Editor of the *Chicago Tribune*, has given the Project much helpful publicity.

For the permanent files prints are required to be 8x10s, glossy, and either doubleweight or singleweight mounted on cloth or paper. The photographer is instructed to take particular pains in washing the prints, otherwise discoloration will take place in time. Also neither rubber cement nor glue can be used in labeling and mounting as these cause discoloration. Mounting tissue is okay; so is library paste. Each print must carry the data as to the subject, its location and the time the picture was taken. While it is easier to determine the value of the print if it is submitted in permanent form, photographers are encouraged to bring in prints of any size and character, with the understanding that if the picture is judged to have historical value, the maker will prepare a print in the required form for the permanent file.

Three dates during the year are set as deadlines for receiving prints for judging, usually in November, February and April. The prints are examined by Mr. Angle,

Director of the Historical Society; generally he invites an official from one of the local book companies to sit in. Besides, there are present two or more members of the camera clubs who advise principally as to print quality and as to whether the photographer might be able to make a more acceptable print from his negative.

Rejected prints are returned to the maker with information as to reason for rejection, sometimes with the suggestion that a desirable picture of the same subject could be made from a different angle.

Exhibition of Prints

The Chicago Historical Society at its building on North Avenue, from time to time devotes a room to hanging of selected prints from the collection. Thus Chicago people learn about the Chicago Area Camera Clubs Association and one of its current projects. Also local photographers who have not participated have an opportunity



DISPLAY OF PRINTS — HISTORICAL PROJECT
A group of prints on display at the last exhibition at the Chicago Historical Society.

to see the kind of pictures considered important from the historical point of view.

In connection with the opening of the last exhibition of selected prints, the Chicago Historical Society had a tea (of sandwiches and coffee) especially for participants, with other photographers invited. At that time the entire file of prints was brought into the room for inspection. The file, however, is available for inspection by anyone at any time by application to the Curator.

Project Appeals to All

Proficiency in pictorial print making is not required for turning out important pictures of documentary or historic value. Choice of subject matter is of first consideration. And the photographer does not need to go far from his home to find it. Good ordinary darkroom practices will turn out prints that can reproduce well in publications. Here the photographer exercises his hobby straightforwardly—no paper negatives, no toning, no worry as to whether the center of interest is properly located. Here "record shots" not acceptable to a salon

jury may become "documentary" and the pictures of preference.

Local-scene photography becomes a fascinating study once started. The photographer is inspired to observe what is going on in his community, and to find out how some everyday things came into being. Then there is the challenge to find the best way to make a factual and understandable record on photographic paper.

Accomplishments

The Chicago Project for Historical Photography was slow in getting under way. Each year more interest has



BELGIAN VILLAGE, WORLDS FAIR CHICAGO 1933
D. Ward Pease, FPSA, Ft. Dearborn Camera Club, Chicago Historical Society File.



MOUTH OF THE CHICAGO RIVER
Dr. Frank E. Rice, Ft. Dearborn Camera Club, Chicago Historical Society File.

been shown than the year before. In the photographic year 1950-51 more prints were submitted and more accepted than in all the earlier years combined. Awards to individuals having 75 or more prints accepted were made for the first time: Mr. and Mrs. Al Bloom, Mildred Mead, J. Sherwin Murphy, all of Jackson Park Camera Club; Tedward A. Dumetz, Jr., Lens Camera Club; Dr. Frank E. Rice, Fort Dearborn Camera Club.

Mildred Mead received the trophy for the largest number of acceptances during the year—131. Jackson Park Camera Club was the trophy-winning camera club with 364 prints. In the past two years, more than 1,800 prints have been submitted in the Project, of which 1,084 were accepted.

Mr. Angle, Historical Society Director, recently wrote: "This morning I took stock of the prints submitted as the result of our last judging. They confirmed my conviction that in the historical photography project, we are engaged in an undertaking for which those who follow us will never cease to be grateful. I cannot tell you how much I appreciate what you have done to make it the success it has become."

The Kodak Colorama *

W. H. DEWITT †

THE IDEA behind the Kodak Colorama in Grand Central Terminal can be traced back to the New York World's Fair of 1939 and 1940. The Kodak Hall of Color at the Fair demonstrated color photography on a huge scale for the first time, and response to the exhibit was so great that Kodak advertising and sales executives planned to produce a similar exhibit whenever possible.

* From a talk given before the Rochester Technical Section of the PSA.
† Color Print Processing Department, Eastman Kodak Company, Rochester 4, N. Y.

When World War II was past, the availability of space in the East Balcony of Grand Central brought the decision to produce a great color show of gigantic color photographs. The Development Department at Kodak's Camera Works and Kodak Research Laboratories worked out preliminary methods. Then the job of making the 18 by 60 feet transparencies on a schedule of one every three weeks was assigned to the Color Print Production Department at Kodak Park.

To make a photographic enlargement usually, it is necessary to have at hand a negative, an enlarger, an easel, print stock, some developing or processing tanks,

and a means of drying the print. The Colorama is no exception to this rule, but much of the equipment used is unique because of its size. Another feature of special consideration is the fact that the print is made up of strips of film spliced together with a transparent tape. This job in itself is an exacting one for which specialized techniques had to be developed.

The Colorama is produced by printing a Kodak Ektacolor negative on Kodak Ektacolor Print film. This is regular Ektacolor material as supplied to professional users. We may assume here that we have at hand a composite negative approximately 5x15 inches from which it is planned to make a Colorama print. We can then follow through the steps of its production up to and including its display in New York.

The first step is preparation of the negative. Because of the magnification used, it is imperative that the negative be clean. For this reason, and for ease of handling, the negatives are mounted between glass plates. The magnification factor used in Colorama prints has ranged from 44 times to 50 times. At this enlargement, a tiny scratch can appear in a final print as a 1-inch line. Finger prints reproduce as large size contour maps. It is difficult to overemphasize the care necessary in handling these negatives.

The enlarger was specially constructed for this project with an eye to providing rigidity, uniformity of illumination, and accuracy of control of negative positioning. The light source is a 1,000-watt prefocused filament lamp. The objective lens is a 10-inch f/4.5 Kodak Ektar.

It isn't often that surveyors are involved in setting up an enlarger, but to insure perfect perpendicularity between the optical axis of the enlarger and the easel, engineers were called in to determine a base line by standard surveying methods, using a transit. The enlarger moves back and forth on a track bolted to the floor. This is necessary since a small angular error produces considerable image distortion when the enlarger "throw" is 40 to 50 feet as used for most pictures.

Special precautions are used to insure even illumination at the easel. Variations in intensity greater than .01 log E across the width of the easel are corrected prior to the printing of any negative. A new lamp is used for each picture. All lamps are pre-aged to reduce possible variation in intensity during the exposure of a picture.

The easel is 19½ inches by 20 feet, with light-tight boxes, to hold the film, located at each end. A form of shutter is provided by the light-tight covers which can be raised or lowered by a pulley arrangement. To ensure that the film is flat during exposure, a vacuum manifold is used. A vernier device mounted at the right of the easel is used in conjunction with an indexing scale mounted along one edge of the negative to determine correct positioning of the negative for each strip. A small overlap in printing permits perfect registration between strips.

Film, supplied on spools in 220-foot lengths, is loaded into the supply box at the left. It is then threaded through edge guides on the easel board into the take-up box on the right.

Test prints are made contact size with a small printing frame at the easel. The enlarger, pre-set for the magnification to be used in the final print, is used as a light source. This eliminates conversion factors otherwise

necessary. An average exposure time is approximately 1½ minutes.

In making the final print, the practice is to position the negative properly for each strip with the easel shutters closed, open the shutters, expose the strip, advance the film, close the shutters, position the negative for the next strip, and so forth.

The processing machine is a Kodacolor Paper Processor modified as necessary for Ektacolor Print solutions. Processing time for an entire picture is approximately 6 hours with the film traveling through the machine at a speed of 3.0 feet per minute. All solutions are carefully controlled to avoid "start to finish" variations in speed or color during the processing of a print.

After processing, the film is removed from the end of the machine in a wet condition in rolls 19 feet long representing the individual strips of the picture. The strips are festooned on wooden frames for drying.

Two special tables were constructed for registering and splicing Colorama prints.

The splicing table is about 4 feet wide by 20 feet long. A steel insert forms a cutting edge down the center of the table top, and a steel straight edge along one side of the table is used to position guide bars for the cutting tool. This same straight edge also acts as a guide for the tape applicator. The table top is also fitted with a vacuum manifold similar to that used on the easel.

The viewing table is used for color checking, registration and retouching. 3500° white fluorescent lamps illuminate the 4x20-foot viewer surface.

After slitting, the strips are registered on the large viewer and a temporary cellulose tape seam is applied to the emulsion side. This is done to assure perfect registration when the permanent splice is made. The registered strips are then returned to the splicing table for application of the Kodapak tape which forms the permanent splice. The tape applicator carries a roll of tape and a small hopper of cement. The splice is formed by applying a bead of cement to the base side of the film immediately preceding the point of contact with the tape.

The steps just outlined are repeated as necessary to complete the picture.

The cellulose tape is generally left in place for a few hours to prevent any leakage of cement through to the emulsion side of the film.

As the strips are assembled, the film is wound onto a large spool. Glass fabric tape is applied as an edge binding and grommets are inserted to provide a means of supporting the picture for display.

Spiral-wound paper tubes form the body of the giant film spool. These spools weigh 220 pounds while the Colorama film itself weighs approximately 75 pounds.

Before shipment to Grand Central, each completed picture is viewed in an area in the Kodak Park Recreational Building. One-half inch cables anchored in the ceiling there support a diffusing screen and the print being inspected. Filtered daylight is used for illumination. Since the area used permits viewing the print from distances comparable to the minimum viewing distances in New York, those defects requiring retouching can be detected during this "preview."

For retouching, Flexichrome dyes are applied with a small retouching brush or an air brush. In general,

retouching has been limited to correcting spots caused by dust particles or scratches on the negatives. Distracting highlights are toned down by the use of the air brush.

Reinforced wooden boxes are used for transporting the finished print to New York.

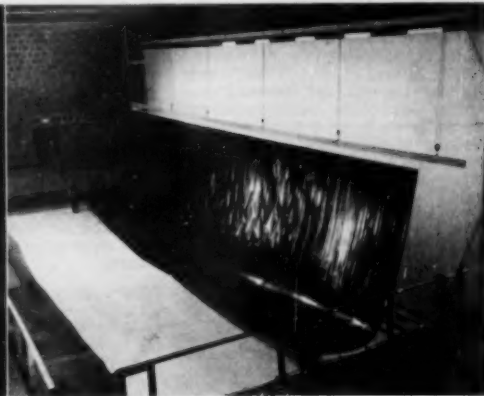
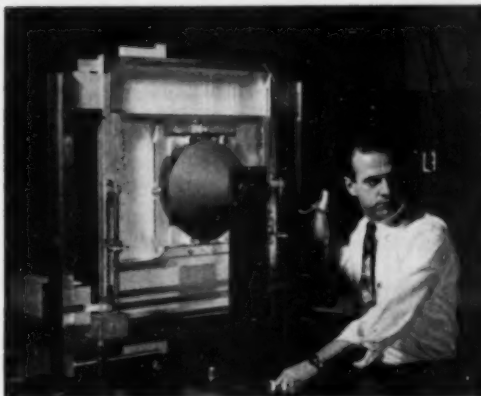
And now let's take a look at the Colorama Display and Photographic Information Center in Grand Central.

A prime requirement of the installation was that it should fit into the architectural atmosphere of the terminal. Public reaction to the display indicates that this aim has been achieved. As a matter of fact, the Colorama is the inspiration of hundreds of letters written by persons from all parts of the country. Most of these letters contain comments on the pleasant and relaxing sight of a

position—at which point the flat car will have moved into position at the bottom of the lift. The flat car can then be attached to the lift again, making one, vertical, traveling unit.

With the film secured in the vertical position, the business of hanging the picture is relatively simple. Small springs attached to the framework are hooked into the grommets along the top edge and one end of the film. Then the film is unrolled slowly and additional springs are engaged as the traveling unit is moved along the track.

On May 15, 1950, the first Colorama was in place and ready for exhibition. The lights were turned on, the curtains pulled back, and the warm glow of a California garden brightened the first floor of the terminal.



ABOVE: Front view of a Colorama Enlarger. RIGHT: Raising a Colorama print for preview, prior to shipment to New York. BOTTOM: (Left) Hanging completed color picture, 18 by 60 feet in size. (Right) Typical Colorama print as displayed in Grand Central Station, New York City, photographed by J. Wolbarst.

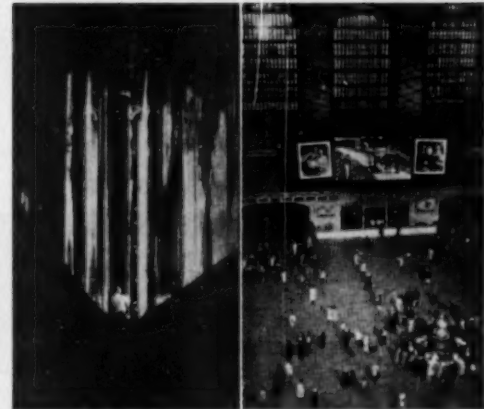
friendly group or colorful garden greeting them as they enter the nation's largest city.

The display and exhibit area occupies the entire east balcony of the terminal. Construction of the permanent steel structure was started early in the Spring of 1950. Here are a few little-known details.

The Colorama is illuminated by a solid bank of cold cathode tubes spaced $2\frac{1}{2}$ inches on centers and totaling 5,328 feet in length. Individual tube lengths are 9 and 11 feet. The tubes operate at 15,000 volts with a total power load of 61,000 watts.

There is a diffuser between the lamp bank and the transparency formed by twelve sheets of opalized methyl methacrylate $5 \times 18\frac{1}{2}$ feet bolted together. Flat white reflector panels are located behind the lamp bank.

An electric extension lift, which together with a detachable flat car rides a special track built at the base of the steel framework, is used to handle the transparencies. The spindle at one end of the 19 foot film spool is fitted into a special bearing plate on the flat car (detached from the electric lift). The spindle at the other end of the film spool is attached to the rising platform or the electric lift. Raising the lift then pulls the spool into a vertical



At the same time, the Kodak Information Center located in back of the Colorama was opened. Here visitors have an opportunity to see exhibitions of fine photography and equipment. A staff of technical representatives is on hand to answer questions on photographic topics.

The pioneering effort of the Eastman Kodak Company in producing the Colorama has created a whole new concept of advertising through giant color photographs.

PICTURE OF THE MONTH

A NEW ACTIVITY FOR EVERY PSA MEMBER

JOHN R. HOGAN, Hon. PSA, FPSA

WHILE YOU are reading this the January Picture of the Month has been completed and all entrants have received their Certificates of Award or their prints, discussions, complete scores, and other things that make this activity interesting. Don't wait for the scores to be published in PSA JOURNAL before you get into the fun yourself, there must be some delay due to publication deadlines.

Read the complete rules in the January JOURNAL (page 33), and then send your 8x10 unmounted prints to Picture of the Month, The Photographic Society of America, 2005 Walnut Street, Philadelphia 3, Pa. Put your name and address, the title of the picture, the Class in which it is entered, and your Division and Portfolio affiliations on the back. Use a strong envelope in which we can return your prints or other matter and include first class postage.

For February the following Classes are available:

Class 1. Open Pictorial.

No restrictions of any kind except size, and open to every member of PSA. Prints in this Class will not be discussed when they are returned.

Class 2. Advanced Pictorial.

For any member of PSA who makes his own prints and has not hung more than two different pictures in two international, national or state salons. When prints not winning Certificates of Award are returned, they will be discussed by qualified analysts.

Class 3. Beginners Pictorial.

For any member of PSA who made the original exposure, but had negatives or prints made by others, amateur or professional. When prints not winning Certificates of Award are returned, they will be discussed by qualified analysts.

Class 4. Open Portrait.

No restrictions of any kind except size, and open to every member of PSA. Prints in this Class will not be discussed when they are returned.

Class 5. Beginners Portrait.

For any member of PSA who made the original exposure, but had negatives or prints made by others, either amateur or professional. When prints not winning Certificates of Award are returned, they will be discussed by qualified analysts.

Class 6. Advanced Nature.

For any member of PSA who makes his own prints, but has not had prints accepted in any nature salon. When prints not winning Certificates of Award are returned, they will be discussed by qualified analysts.

Class 7. Beginners Nature.

For any member of PSA who made the original exposure, but had negatives or prints made by others, either amateur or professional. When prints not winning Certificates of Award are returned, they will be discussed by qualified analysts.

Your attention is called also to the Nature Competitions handled directly by the Nature Division. Nature Division members will receive proper entry forms in due time.

Class 8. Abstractions, Photographs, Unusual Effects.

An Open Class for every member of PSA, no restrictions of any kind except size. Returned prints will not be discussed, but it is hoped the makers will include discussions when they send the pictures to us, so that they can be included when winning prints are mounted in books for the PSA Library.

Class 9. Personal Photography.

For every member of PSA whose pictures reflect his own feeling and thinking about any subject whatever, but who is not interested in "pictorial photography." Maximum size 8x10, unmounted, prints to be made by the entrant.

This Class is under the personal supervision of Jacob Deschin, APSA, who will comment at his own discretion on selected prints, and select the three best for Certificates and publication in PSA JOURNAL. No points will be awarded in this Class, but the winning prints will be mounted in books of their own Class, with the permission of the entrants, and used for the further purposes of the Society.

Come on folks, let's go!



FORE

Masaru Taketa

A winner in the previous Print of Month Contest.

OFFICIAL NOTICES

Annual Meetings

The meeting was called to order by President Mulder at 1:25 PM, October 10, 1951, in the Grand Ballroom of the Book-Cadillac Hotel, Detroit, Mich.

Owen K. Taylor spoke in favor of a special Division for stereo. Charles Howe approved the idea and expressed the hope that such a Division would be created. George Johnson pointed out that Color Division already has a stereo program in operation, and was opposed to the establishment of a separate Division for stereo. Dr. Wightman spoke in favor of a separate Division for stereo, emphasizing the high technical nature of stereo, and the fact that stereo is black and white as well as color. Dave Darvas spoke in favor of stereo salons.

"Ollie" Romig told of the establishment of the Byron Chatto Memorial Cornerstone Membership through donations by several of Mr. Chatto's friends.

The General Membership Meeting was adjourned at 1:51 PM, and the National Council Meeting was called to order at 1:54 PM by John Mulder. The following District Representatives, Honorary Representatives, and Board Members were present:

| | |
|------------------|--------------------|
| Sten Anderson | Prescott Kelly |
| George Blaha | Curt Lutz |
| Alfred Blyth | John Mulder |
| Clyde Carlton | P. H. Oelman |
| Angel de Moya | Harry Reich |
| Frank Fenner | "Ollie" Romig |
| Mrs. Caryl Firth | Hoyt Roush |
| Larry Hanson | C. C. Ruchhoff |
| Charles Heller | William Strann |
| Herbert Howison | Sandra Thaw |
| Vincent Hunter | Sidney Thomas |
| George Johnson | Doris Martha Weber |
| | Paul J. Wolf |

John Mulder, reviewing the 1950 meeting of the Society's National Council, reported that the suggestion of Cortland Luce regarding correspondence courses seemed rather complicated and involved too much office help but was still under consideration. Nothing has been done regarding Axel Bahnsen's suggestion that material from the Portfolio Notebooks be used to aid new beginners, but this suggestion is to be acted upon by the new Board.

Walter Pietschmann spoke in favor of Ralph Gray's petite salon.

Retiring President Mulder introduced the incoming officers and Mr. Harkness took the chair.

Mrs. Phelps read the obituary list for the preceding year.

Mr. Harkness discussed plans for the coming year.

Board Meeting

The 12th meeting for the 1950-51 term of the Board of Directors was called to order by the President at 9:55 AM at the Book-Cadillac Hotel, Detroit, Michigan, on October 10, 1951.

The following were present: G. W. Blaha, W. E. Chase, T. Firth, N. Harkness,

PSA JOURNAL, Vol. 18, Feb. 1952

C. Heller, T. T. Holden, H. M. Howison, V. H. Hunter, G. F. Johnson, J. H. Magee, J. W. McFarlane, J. G. Mulder (presiding), P. H. Oelman, H. R. Reich, C. C. Ruchhoff, W. F. Swann, Doris Weber, E. P. Wightman, S. P. Wright (Secretary).

President Mulder invited Owen K. Taylor to the meeting to speak for the Board of Governors of the Stereo Society of America, to request PSA to consider the possibility of setting up a special division for stereo photography, and to organize monthly and annual competitions in stereo. He stated that his organization has developed rules and standards for stereo competition and has published a complete bibliography on stereo.

Mr. Chase favored establishment of a stereo division. George F. Johnson pointed out that CD already has provisions for handling stereo competitions, and there is no reason for a new division to handle stereo. Mr. Taylor said CD judges had demonstrated inability to judge stereo. It was decided that a committee should be appointed by the incoming President to investigate this subject.

The District Representatives were invited to the meeting. The following were present: H. C. Carlton, Prescott V. Kelly, Dr. M. L. Kuhs, Dr. C. J. Marinus, Elbridge G. Newhall, Louis Parker, O. E. Romig, Mrs. Sidney Thomas, Paul J. Wolf.

Mr. Newhall spoke on the desirability of mailing PSA JOURNAL on time. Mr. Harkness replied that this matter is being taken care of and would continue to receive careful attention.

Mr. Kelly asked for more intimate contact between the Society and the Representatives.

There was a general discussion regarding securing lists and other information from Headquarters. Mr. Heller said that Headquarters records were in good shape and that service would be improved. Mr. Harkness congratulated Mr. Heller and Mr. R. Wright on the manner in which business is being handled at Headquarters.

Dr. Kuhs brought up the subject of taking better care of delinquent members.

Mrs. Thomas asked that benefits be arranged for Camera Store Memberships.

Dr. Marinus urged that more Regional Conventions be arranged, to increase contact with members in the small cities.

Mr. Wolf discussed handling of Color shows at recent conventions. In the future CD will supervise these shows.

Miss Weber, in behalf of Aubrey Bodine, asked about the eligibility of prints that have hung in another PSA show. In the discussion which followed, it was agreed that PSA Exhibitions were to be regarded like any other international exhibit, and that moving the exhibit annually was no excuse for resubmission of accepted pictures.

Adjournment was at 12:13 PM, to reconvene at 9:00 AM Thursday, October 11, 1951.

The meeting was resumed at 9:00 AM at the Book-Cadillac Hotel, Detroit, Michigan, on October 11, 1951. The following were present: G. W. Blaha, W. E. Chase, N. Harkness, C. Heller, T. T. Holden, H. M. Howison, V. H. Hunter, G. F. Johnson,

J. H. Magee, J. W. McFarlane, J. G. Mulder (presiding), P. H. Oelman, H. R. Reich, C. C. Ruchhoff, W. F. Swann, Miss Doris Weber.

Mr. Harkness reviewed recent developments in his plans to increase advertising revenue from PSA JOURNAL. He and his partner have sold, without cost to PSA, approximately \$15,000 worth of new advertising and they have been promised an additional \$47,000 worth. He arranged with Mr. Hayden to work with PSA JOURNAL on a temporary basis to develop a program for full-time selling of JOURNAL advertising. The Board authorized Mr. Harkness to negotiate month by month agreements with advertising salesmen. Stuart Chambers has agreed to serve as business manager.

Mr. Howison reported continued investigation of the By-Laws in connection with recent Board actions. He presented the following amendments, which were approved by the Board and which will be submitted to the National Council for vote.

ARTICLE III, Section 2—Add the following after the first sentence: "Members whose dues shall remain unpaid thirty (30) days after the anniversary of their admission to membership in this Society, shall be considered as not in good standing."

ARTICLE IV, Section 2-a—After the word "Contributing", add the words "Cornerstone Life".

ARTICLE VI, Section 8—After the words "unauthorized expense", delete the balance of the sentence and replace with the words "without the approval of the Board of Directors".

ARTICLE VII, Section 4—Delete the present Section 4 and replace with the following: "Procedure. At least five (5) months prior to the official election date, the Nominating Committee shall have prepared an official slate of one or more candidates in good standing for each national, sectional or district office. The Nominating Committee shall have obtained acceptance of candidacy, and of office if elected, from each candidate and shall certify the slate of candidates to the Secretary who shall cause such slate of candidates to be published in the official journal of this Society at least three (3) months before the election."

ARTICLE VII, Section 5—Delete the present Section 5 and replace with the following: "Petition Nominations. Any twenty-five (25) or more members in good standing of this Society may submit to Headquarters a written petition nominating any eligible member for any national elective office. Any twenty-five (25) or more members in good standing of this Society, resident in one of the three geographical sections described in Article IX, Section 2-e of these By-Laws, may submit to Headquarters a written petition nominating any eligible person resident in that geographical section for that section's representative on the Board of Directors. Any ten (10) or more members in good standing of this

Society resident in a District, may submit to Headquarters a written petition nominating any eligible person resident in that district for the office of that district's representative to the National Council. All Petitions to be valid must be accompanied by a statement in writing from each candidate declaring his or her willingness to accept office if elected, and shall have been submitted to Headquarters at least forty-five (45) days in advance of the official election date. Petitions so submitted shall be certified to the Secretary and to the Elections Committee who shall, in turn, cause the names of such candidates to be placed upon the official ballot."

ARTICLE VII—Insert a new section to be known as Article VII, Section 7 as follows: "Article VII, Section 7. Voting. All members in good standing of this Society shall have the right to vote for all candidates for national elective office, but only those members in good standing of this Society resident in a given geographical section or district, as such geographical sections or districts are described in these By-Laws, shall have the right to vote for representatives of that section or district."

ARTICLE VII—Since the above constitutes a new Section 7, renumber the present sections known as Sections 7, 8, and 9, to read "Sections 8, 9, and 10."

ARTICLE IX, Section 2-e—Delete the present Section 2-e and replace with: "Three (3) members of this Society, the first elected to represent members resident in American and Canadian territory lying east of the Official Central Time Zone, the second elected to represent members resident in American and Canadian territory comprising the official Central Time Zone, and the third elected to represent members resident in American and Canadian territory lying west of the Official Central Time Zone."

ARTICLE IX, Section 3—Delete the first sentence and replace with: "The Board shall hold at least six (6) meetings each year, not more than three (3) months elapsing between meetings."

ARTICLE IX, Section 4—Delete the last sentence of this Section and replace with: "In addition the Board may transact emergency business by mail, telegraph or telephone."

ARTICLE XVIII, Section 4—Delete the first sentence of this Section and replace with: "Any member in good standing of this Society may, at any time, submit in writing to the National Council any proposed amendment to this Constitution and these By-Laws."

By mutual consent, it was agreed to table the following proposal. It will be acted upon at a later meeting. This proposal was that Article 9, Section 5 be changed by deleting the word and numeral "five (5)" and substitute the word and numeral "seven (7)".

Mr. Howison commented on his four years of service on the Honors Committee. He has noted several basic changes in thinking with regard to requirements and qualifications for Honors. He suggested that PSA determine and publish critical bases for awarding the various honors. Mr. Oelman's experiences substantiated Mr.

PSA CONVENTION

New York, New York, August 12-16, 1952

Howison's recommendations. It was their combined feeling that Article XIX of the By-Laws provides for operation of PSA honors in a reverse method of that desirable, since it seems advisable for the Board to establish the broad policies rather than to leave all these matters for the discretion of the Honors Committee. It was unanimously voted to ask the incoming President to appoint a committee with the assigned duty to recommend to the new Board a setup expressing currently the qualifications and requirements for PSA honors, this committee to be composed of former honors committee chairmen and members of general interest.

The Board approved the August 13-16 dates for the 1952 Convention in New York.

The meeting was declared closed at 12:30 P.M. J. G. MULDER

STEREO

DON BENNETT

There's good news tonight. Stereo has achieved the status of a PSA Division. Dr. Frank E. Rice, APSA, of Chicago is the Chairman of the new Division. Herbert C. McKay, well-known authority on stereo photography and Director of the Stereo Guild, has agreed to give the benefit of his organizational experience to the new Division.

Creation of this Division should mean much to our members interested in stereo, and it should also step up membership in the PSA. Owen Taylor has already brought in ten new members. Now if you other readers will get busy. . . .

A Stereo Division means more stereo activity within the PSA. If you are even slightly interested in stereo, why not affiliate with the new Division. It costs only an extra dollar and you'll derive far more in benefits than the money you invest. Send your buck to PSA Headquarters in Philadelphia. (If you also invest some time in the Division, you'll reap benefits money can't buy.)

* * *

Had a letter from Lee Comeys of Gates Mills, Ohio. He has been enjoying Jack Norlings articles as much as we have. Lee has been having some fun in experimenting with stereo in his own fashion.

His letter says: "As a Leica enthusiast I am having great fun making stereograms and mounting them in Verascope masks for viewing with a Busch viewer. They're wonderful!"

Now there's a stereo fan for you. Sure they're wonderful.

However, Lee has run into a bit of difficulty. He's read several books on the subject of stereo but finds them too technical. Feels a need for some ABC stuff.

Well, now, just how ABC can we get. Perhaps we have an unsuspected fourth reader (Lee makes No. 3) and we should get more to the abc instead of the advanced ABC. Play it safe and assume that

Lee can't even point a Leica straight. Do you mind, Lee?

One of the early attempts to conquer the high cost and radical complications of stereo which came from balanced shutters, matched lenses and transposing, along with transposing printers, viewing boxes, adjustable interaxial controls and a lot more Greek, was the use of a single lens camera with suitable spacing means to provide a pair for stereo viewing.

More recent forms of such simple devices are the sliding base for the Rollei cameras and the parallelogram base for flopping the camera from side to side. Perhaps you have seen these in the literature, or in stores.

Most books on stereo provide the design of a simple, home-made sliding base, usually of wood, but better if made with metal sliding surfaces.

The point of this discussion is that a base of some sort is highly desirable, a firm platform which holds the camera in both positions, properly aligned, and most important of all, level. In fact, a spirit level should be included in any such home-made device. (Don't forget to level the camera mounting plate before fastening the spirit level down!)

Actual spacing between the lens positions can be almost anything you want to make it, IF. That IF is important. Conventional spacing ranges from 65mm down to about 57mm for normal subjects at normal working distances. Aerial surveyors use a base from one to five miles by flying that far between successive shots. If you are working in the micro or macro field, your spacing might be only a few millimeters. So unless you know exactly what you are doing, stick to a spacing that is conventional until you get things under control.

Next point is to have the camera support level in the horizontal direction, the line perpendicular to the direction the camera is pointing. The forward axis can tilt up or down as composition and subject dictate, but that side to side axis must be as flat as if a surveyor laid it out with due allowance for the curvature of the earth!

So you have a level camera and the proper spacing and your exposures are matched. Then what.

Then comes the tricky part. Tricky, if you don't know what goes on. Simple if you use a stereo camera with related mounting service. In this case all you do is write a check. But in Lee's case, it isn't that simple. (There are mounting services which will do unconventional mounting like yours on a time and materials basis, and if you get discouraged we'll gladly supply name and address.) Lee wants to put his films side by side so they look like they were made with two Leicas instead of one.

Let's de-trick his problem. Lee, go to an art store and get yourself a thick piece of acetate sheet, say 1/32nd of an inch thick. Tape it to a piece of glass, say an 8x10 plate or a small sheet of window glass. Now scribe a deep scratch the long way of the acetate sheet, low down. Run some India ink or similar black dirt into the scratch so you can see it. Now you have a base line.

Erect a perpendicular to the base by

scratching another line at exact right angles to it. At your proper viewing separation, which is probably 65mm (measure your Busch masks), scratch another line perpendicular to the base line. (For you guys who have been out of school ten years or more, perpendicular ain't the same as vertical, it means at right angles to!)

You have built a mounting guide.

By placing a film in register on the base line with the vertical line passing through a point at infinity, naturally with the left film on the left line and with the right film on the right line, you have registered your stereo shot in alignment. The base line preserves your horizontal alignment and the vertical lines maintain proper eye spacing.

But what if it is an interior shot and you can't see infinity through the walls? That is a equine of another tint.

Herb McKay makes an adjustable guide for such problems, with the spacing variable for registering an object at a known distance from the camera. This calls for fine workmanship to keep the verticals parallel as you adjust the guide. Another approach is to lightly scribe several lines near one of the verticals at the proper distances for the range you will normally use.

Spacings may be determined by formula, but since the measurements involved will be very small and errors will be large, make a calibration film outdoors with a prominent infinity target such as a steeple or water tower, and set up near targets at the desired distances. Actually, a lot of this can be done on one film by spacing the targets laterally, aligning the print at infinity and taping to a temporary film support so you can shift the guide for marking the intermediate registration lines. This may sound complicated, but try it and you'll find it is simpler to do than to read about.

Frankly, while such experimenting can be fun for a gadgeteer, we still stick to our thesis that what is pushing stereo to the front right now is the simplicity that the service provided by the manufacturers gives to us at low cost. The finagling and experimenting that Lee Comeys has tackled was a necessary evil for years and retarded the expansion of stereo to the masses. He runs into the additional hazard that unless his stereo slides made by good, but unorthodox, means are mounted to accepted standards, he loses the fun of joining a stereo portfolio, of being able to project his slides at stereo shows and all the rest of it.

One German manufacturer has seen the error of his ways and brought out a new model that conforms to American practice. Fortunately the Busch Verascope, although the film aperture is different, is compatible with the widespread Stereo Realist size. Note that we haven't used the term standard, because there is none, unless it be the outside size, more or less uniform to all of the current crop. But we hear of a new size that will be still smaller! At least we can hope the mounts will be compatible. One thing we are sure of . . . they can't very well change the interocular spacing of the human skull within the corporate life of any firm wanting to set up a new standard for separation!



Pictorial DIGEST Division



Devoted to News of the Pictorial Division of the Photographic Society of America

Broader Horizons for Portraitists

MAURICE H. LOUIS, APFA

THE NEW YEAR ushered in an effort on the part of Portrait Portfolios to encourage a greater freedom of expression in portraiture. This endeavor is aimed at unshackling photographers from thinking in terms of the static, commercial-type portrait, and substituting in its stead a likeness which gives an insight into the character and emotional qualities of the subject.

To this end, Portrait Portfolio #15 has been organized and is composed of fifteen members from thirteen states. They are all amateurs who have progressed beyond the elementary stages of technical ability, and who have the common desire to bypass the hackneyed, conventional portrait. This experimental group was selected from volunteers by the writer who is assistant Director of the Portrait Portfolios.

This new portfolio will be under the personal guidance of Miss Gerda Peterich, APFA, who will act as its commentator. Miss Peterich, teacher, lecturer and author, is well-known for her portraits and pho-

tographs of the dance. Formerly head of the Department of Photography at Ohio University, Miss Peterich is now doing research in the history of portraiture at the University of Rochester for her master's degree.

Miss Peterich is a firm believer in expressiveness in photography and has been successful in imparting this to her students. She feels that the successful portrait must possess content as well as meaning. If these are lacking, the photographer will be unable to reveal the subject's true personality. While a good command of technique is necessary, this, along with the photographer's desire for honors and remuneration, must be secondary to creating worthwhile portraits for the sake of good portraiture alone.

The progress of this new portfolio will be watched with great interest, for its success will be the signal for further efforts to pull portraiture out of its present rut.

space on the comment sheet by saying simply "No comment" or "I agree with what Jack said" or "I don't understand this type of stuff."

The notebook in this portfolio is bulging fat. Every member, every trip, writes freely—and legibly!—and everyone of the 15 members is on a friendly, first-name basis with every other member. Whenever any member of this portfolio is near a town in which another member resides, he tries to drop in on the fellow-member, or at least give him a call.

All the members of this portfolio share it with other portfolioists in their towns, and with non-portfolioists who are interested in photography. An amazing number of new PSA memberships and new portfolioists have come into the fold through this practice.

The commentator has never yet held up the portfolio, and he gives every print serious consideration and a lengthy analysis. If the print is bad, he says so frankly, and tells why. If it is so bad that it is hopeless he says so; if any sort of work will save the print, he explains how to do that work. He is lavish in his praise and appreciation of good prints, and if he thinks they are good enough, he urges the makers to send to the salons. If the prints are good, but not quite good enough, he is most explicit in his instructions as to how the print can be improved.

This portfolio is known far and wide as "The Golden Rule Portfolio." It has no

number. If you write to Eldie Christhill about joining it, he will tell you that it doesn't exist—but it *could* exist—it could be the very portfolio to which you now belong, if you, the other members and your commentator, would each make just a little effort in the right direction.

Do you want to belong to the Golden Rule Portfolio? You already belong to it—if you and the other members like the idea well enough!

You Can't Beat It

At one time or another, and from various angles, tons of material have appeared in these columns dealing with the relationship which exists between portfolio members and their commentators.

At the Convention in Detroit we were amazed all over again at the depth and the warmth of the feeling which exists between these two groups. We talked to a very large number of our fellow portfolioists, and almost without exception each one agreed that *he* had the best commentator in the business. As a matter of fact, we heard several arguments that became quite highly personal and almost bitter, as various members of different portfolios pointed out the achievements of their particular commentators, and the things that their commentators did that no other commentators did.

On the other hand, we also talked to perhaps a dozen commentators, and it was very amusing to see how fatherly their attitude was regarding the people in their portfolios. Their argument wasn't that they had the best photographers in their portfolios, but they had the hardest working, most ambitious, most eager, most sincere members.

It seems to us that this is exactly as it should be, and it seems to us that this is one of the very finest things about one of PSA's greatest activities: The Pictorial Division's Portfolios.

By and large, PSA is one great big happy family. There is a wide variety of interests, of course, and a lot of healthy rivalry between the Divisions, but when you get back of these things, you find an unwavering loyalty to the Society. This feeling is not exemplified anywhere in PSA more dramatically, it seems to us, than in the father-and-son relationship which exists between our commentators and our portfolioists.

Long may they wave—both of them!

Swiped from John Hogan

Maybe some of you commentators will be interested in this idea—and if you are a member of a portfolio and your commentator doesn't propose something of the sort



MISS EVELYN ROBBINS, Associate Editor

The Golden Rule Portfolio

How would you like to belong to *this* portfolio? Every member of this portfolio gives complete data on every print he puts into the portfolio. So far, every print has been properly spotted, and was a print made especially for the portfolio—not a print picked from an assortment of old prints, at the last minute.

In all its history, this portfolio has not been held up by any member; it has moved out not later than the fifth day, and very frequently before the fifth day.

Every member of this portfolio gives an honest and carefully considered estimate of every print, and if he has any thoughts which are too lengthy for the comment sheet, he includes them in the notebook. No member, so far, has ever wasted his

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RECORDED LECTURES

Philip B. Maples, *Director*
29 Spring Street, Brockport, New York

himself, you might be moved to suggest it to him!

We have swiped the idea from John Hogan, Dean of Commentators. Recently, John sent one of his negatives on the rounds, and required each member of the portfolio to make a print from it, and send that print directly to the commentator.

As might be imagined, each member saw something different in the negative, cropped his print differently, toned it differently, and keyed it differently. We imagine that the experiment was as interesting to John as it was to each of the members of Portfolio #19, and it is an idea that we can heartily recommend.

We do not want to commit other commentators to be as generous, but to each member of the portfolio who demonstrated that he had really taken John's teachings to heart, John sent one of his own inimitable salon prints—the prize certainly worth working for!

Comments By a Commentator

THOMAS T. FIRTH, APSA

I am not the first to suggest it, but it seems to me it would be better to call those affairs to which we send prints "exhibitions" instead of "salons." The words "salons" and "salooners" are so much alike that sometimes I wonder if there isn't a sort of kinship between the two words. Probably my thinking is colored by the fact that the judges of a salon so often adjourn to a saloon after wrestling with a salon—and hearing some of the names that they are called by the unsuccessful exhibitors and all losers.

Those submitting prints are called exhibitors; why not call them "salooners" or better still, "salooners"? They sure need a drink after working so hard to make four good prints, and then getting four big goose eggs.

Another thing I would like to mention is a statement recently made by a member of the Big Brass, to the effect that there should be an artist on every jury. I will heartily agree to that—as soon as I hear that the painters are insisting that a photographer serve on each jury that judges paintings!

AN INVITATION

This is an invitation to every PSA member to participate in the PSA American Portfolios.

Enrollments are now being received in the following specialized groups:

PSA Pictorial Portfolios
PSA Portrait Portfolios
PSA Miniature Portfolios
PSA Control Process Portfolios
PSA Star Exhibitor Portfolios
(For PSA Award of Merit Winners)
PSA Nature Portfolios
PSA Photo-Journalism Portfolios

For information concerning any of the foregoing activities and for enrollment blanks, write to the Director of the PSA American Portfolios, Eldridge R. Christhill, Hon. PSA, APSA, Suite 406, 800 Davis Street, Evanston, Illinois.

Recently I read an article in one of the photographic magazines from the other side of the Atlantic, in which the author discussed artists and photographers, and what each stood for, in the opinion of this writer. He pointed out that the work of the artist and of the photographer are so different that both fall down when they try to imitate each other. It was his opinion that when the photographer tries to imitate the art forms of other artists, the photographer reflects an inferiority complex which he should not have because photography has its own vital part to play in modern life. It was his opinion that we must separate art from photographic vision; that while the two overlap a little, they do not actually cover the same ground. The whole purpose of photographic vision is to record and to reveal facts and objects, and so long as photography does these things it will be one of the most valuable visual activities of mankind.

That is what the gentlemen from across the waters had to say, and I think he expressed himself very well. I have no inferiority complex about my form of art, and I make no apologies to the artists. Let them do as they wish, and let photographers do as they wish—and let each judge his own exhibitions.

In the portfolios, we all refer constantly to "salon prints" and I think it is quite possible that by doing so we scare away a good many prospective members. Those of us who are interested in salon exhibition, and particularly those who are interested in hanging up records as salon exhibitors, lay entirely too much stress upon the importance of the so-called salons. It is a big and almost fatal mistake to assume that everyone who is interested in photography is interested in salon prints.

I think that the greater majority of photographers have no desire to make prints for anything except their own satisfaction. They want to make pictures, and they want to make good pictures, and they may even want to make big pictures, but they want to do these things simply to satisfy themselves, their family, and their friends. These photographers don't get the break they should in PSA, in the JOURNAL, and in the portfolios. At least, that's the way I look at it.

We have to be careful about being too formal and austere, for if we are we will scare away the snapshotter who wants to be one of us, and who wants to profit from the information we have and can share with him. These are rambling thoughts, and not quite the sort of thing that has appeared in the "COMMENTS OF A COMMENTATOR" in the past. They are my thoughts as a commentator, however, and they are honest thoughts, worth thinking about.

Maybe it would be a good idea to have a portfolio for people who are not interested in salons and never will be interested in the salons but who just want to make better snapshots. If we get up such a portfolio, maybe it would be a good idea to fine each member \$10.00 for each time he mentions the word salon in the notebook or on a criticism sheet. Boy, what a portfolio that would be!

The International Portfolios

COL. C. J. "JOB" PERRY, Associate Editor

"East is East and West is West, and n'er the twain shall meet" may have been the order of the day when Kipling was a smooth faced lad, but then again that was before the advent of PSA and PD's International Portfolios. Today East meets West and West entertains East right in the front parlor where they can park their elbows on Aunt Suzie's what-not! Our many friends around the world is evidence of the fact that there's nothing mysterious in how the other half of the world lives. Standing on common ground in a mutual hobby and banded together in a portfolio of their own choosing, our friends of every corner of the earth become just one group of mighty fine folks earnestly endeavoring to improve themselves, and each other, in their common avocation.

Under the joint supervision of hai Estimer of Iowa and Manual Ampull of Mexico, the Mexican-American Portfolio has taken an added spurt and we now have the second circuit making its rounds in the portfolio.

Is there a Swede in the house? There are vacancies in the Swedish-American Portfolio at the present time. We believe that our friends in the Old Country can be influenced to start another circuit there too, if enough stateside Swedes are interested.

On the other side of the world our friends in the Camera Pictorialists of Ahmedabad, India, held their First International Pictorial Photographic Exhibition in November and December and awarded silver and bronze plaques as well as certificates of merit for both monochrome and color. They also held their second annual general meeting last October and elected Surendrabhai M. Parekh as President for the ensuing year. Surendrabhai is supported by Chandulal J. Shah, Vice President, Dhruva C. Engineer, APSA, Secretary, and T. F. Geti as Joint Secretary. Datta B. Khopker, C. B. Patel and D. U. Mehta constitute the Governing Body. In addition to his many duties at home in the interests of pictorial photography, Dhruva Coommar Engineer finds time to handle the duties of General Secretary for the India-American Portfolio on the India side, and, together with Don E. Haasch of Boise, Idaho, the American General Secretary, is guaranteeing that the India-American Portfolio is not only in capable and competent hands but one of the portfolios that is winning its place in the sun.

What do you mean 'N'er the twain shall meet? Kipling just never heard of PSA and the International Portfolios, that's all.

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PSA International Portfolios

There are openings in the following PSA International Portfolios for Pictorial Division members who are interested in interchanging prints for comment and analysis with the leading photographers in foreign countries:

Anglo-American
Canadian-American
India-American
Australasian-American
Cuban-American
French-American
Swedish-American
South African-American
Brazilian-American
Belgian-American
Chinese-American
Netherlands-American
Dominican-American
International Medical Portfolios
Casta Rican-American
Caribbean-American
Mexican-American
International Control Process Portfolios

For information, write to the Director of PSA International Portfolios, Col. Charles J. Perry, 7431 Ryan Road, El Paso, Texas.

News of the Pictorial Division

GEORGE GREEN, Associate Editor

Helpful Photo Hints

Ah, you bashful photographers! Hiding your know-how under a darkcloth. Don't you know that this *Helpful Photo Hints* is your column? You tell me about shortcuts or new methods or embryonal ideas that will help all us PSAers and I'll pass it along through our PD section. Surprise me, huh? Deluge me with hints!

Dr. R. W. Beede, 65 East Midlothian Blvd., Youngstown 5, Ohio, passes along this hypo eliminator.

A 0.025% of sodium hypochlorite is rapid, inexpensive and effective for complete removal of hypo. Merely add one teaspoon of fairly fresh Clorox to one quart of water and mix thoroughly.

Dr. Beede washes his prints in water for five minutes after fixation. They are then given two consecutive baths of five minutes each in the Clorox solution. This is followed by a final five minutes washing in water.

* * * * *

I may as well throw one in for luck. For those who process their own color film, it is advisable to purchase at least six rolls of color film with the same emulsion numbers. Run the first roll through; entering all pertinent data in a reference book. You will then be able to determine the

necessary adjustments (lens, shutter, illumination sources) for the entire batch.

Experience With a Moral

Recently, on a cold and dismal night, I drove more than 30 miles to a camera club meeting where I was scheduled to speak. During my hour's drive (I lost my way three times) I tried to put into everyday language the technical and dry indigestibility of the reciprocity effect of color films especially when exposed with high speed flash sources.

To shorten a long story, suffice it to state that I finally Americanized it to the point where even a beginner could understand what I meant: And, thus I entered the meeting place.

My first surprise was the turnout. Despite the weather there were more than 40 people representing both sexes from high school to grandparent. On exhibit was a travelling print show from the New England CC Council. The meeting was called to order and each person received a sheet of paper. They then entered their selections for the five places in the show. My second surprise was that the members, practically as one unit, had preferred landscapes for the first four honors with a portrait of a child as the fifth choice.

We'll skip the color slide competition which, incidentally, was excellent not only from the number of slides entered but also for the interpretation of subject matter, and also my talk and subsequent question and answer period, and come to the "meat" of this article.

My closing words harped back upon selectivity and perspective—training the eyes to see what you imagine you are looking at and making the exposure in that manner which will produce what your mind saw.

Gosh, that's so simple it isn't even worth spending any time on it. I've said it so you might just as well, too. But, now that you've done so, stop and think. How many times have you raised the camera and pressed the shutter release without giving the subject matter another glance other than the first one which prompted you to take the picture? Once? Twice? Or have they been so numerous that you cannot truthfully determine? And, shall I point a finger at your results? Just answer this: What is your acceptable print percentage compared to the number of exposures? That's all brother!

But, let me get back to the subject. I hammered and yammered about training one's mind to actually analyze what the eyes were seeing. It's an obvious fact that we take the line of least resistance and whatever pleases us at first glance is sufficient. This was proven by the almost unanimous choice of landscapes in the print show.

And, at the members' insistence, I analyzed the show for them with the result that only two out of the five chosen originally remained in my final selection. It was pointed out that there is just as much danger in including too much as there is in omitting just a trifle. There cannot be any fast rule except that one must look first, analyze secondly, and see thirdly.

I do not hold entirely with those who claim that what is on the negative is immaterial because the camerist can achieve the end result by darkroom processes. It is easier to crop something in a negative than to resort to double printing. It is just as simple to try to obtain a compositionally perfect negative at the time of exposure as it is to spend many hours in the darkroom trying to obtain what you first saw.

And even the perfect negative does not make the perfect print. The negative is like a model, without any make-up. Only by training and experience (knowing what to do and how to do it for the achievement of different moods and results) can the model be made to look like what you want. Like make-up, the darkroom worker has at his command the various tools and accessories by which he can improve upon the negative.

Yes, you, too, have probably spent a great deal of time in the darkroom, wasting paper and chemicals and fraying your patience and temper. Yes, you, too, have probably resolved that photography has lost its appeal and as far as you were concerned it could be given back to the birds. No competition was worth the harrowing demands of producing a competitive print!

Maybe you're right. And, again, most likely you're wrong? Anything worth doing should be done right. Why don't you refer to last month's note in the News of the Pictorial Division and check the rules for securing the Personalized Print Analysis Service. I'm certain that the director of this service will be more than happy to help you along the highway to better photography. Just follow the rules outlined.

Award of Merit

Those who have become Star Exhibitors since our last listing, and those who have advanced in their Star Exhibitor Ratings are as follows:

New One Star Exhibitors

Louis F. Gonsky, New Orleans, La.
Walter F. Wood, Montreal, Que., Canada
Dr. Esteban A. de Varona, APSA, San Jose, Costa Rica
Charles B. Baker, Birmingham, Mich.

Advanced from One to Two Star

William J. Spicer, Cincinnati, Ohio
Barton King, Niagara Falls, N. Y.
E. Throop Geer, M.D., Riverside, Conn.

Advanced from Two to Three Star

Karl F. Kunkel, New York, N. Y.

New Four Star

Merrill W. Tilden, Chicago, Ill.

Bread without jam is like a date without somewhere to go. It's only half the pleasure. The same is true with your prints. Winning Club competitions and salons is only half the thrill. Flatter your ego and glow inwardly by becoming a Star Exhibitor.

Somehow or other there was an error made in reporting the requirements for the different Star Exhibitor ratings listed in the October JOURNAL. The requirements for the various degrees of this award are:

One Star: 6 different prints—30 total acceptances
Two Star: 16 different prints—80 total acceptances
Three Star: 32 different prints—160 total acceptances
Four Star: 64 different prints—320 total acceptances
Five Star: 128 different prints—640 total acceptances

These awards are retroactive and are available to all Pictorial Division members who submit proof of their accomplishments. Send to Glenn E. Dahlby, Director of the Award of Merit, for further particulars. His address is in the masthead on the second page of this section. Lay that PSA JOURNAL down and do it now! Even a postcard will suffice.



A. LYNNE PASCHALL, Associate Editor

Wake Up Your Club

A letter came into our hands recently from a man who is making an earnest effort to improve conditions in his camera club. The club is a very substantial one and rates high in its territory, but it is plagued by the same troubles that afflict us all. He says in part:

Our club conducts a monthly competition in black-and-white salon prints. Through a point system the winner is given a trophy at the end of the year.

We find that as the year progresses and two or three persons outdistance others in accumulating points, the rest seem to lose interest and take the attitude of "What's the use to enter prints, we can't win." Consequently, fewer prints are entered and the competition lacks enthusiasm . . .

Also even at the beginning of the year, we don't have as many prints entered each month as should be expected in a club of approximately sixty members . . .

Doesn't this remind you of conditions within your own club? Of course it does! It is exactly what happens in every club, large or small. One or two energetic members get ahead of the rank and file and thus create a gap that seems to grow wider with time. The standing of the club in the community depends largely upon these brilliant members, so we dare not lose them.

On the other hand, there are some ambitious souls who hope to reach the top some day but are progressing very slowly. They are perhaps the most important group because once in a while one of them brings in a picture. It may not be a prize-winner but it is an honest effort to cooperate. Such members are easily discouraged and must be handled with tact and understanding, for they are the future hope of the club.

Below this classification is often an army of "chair warmers" who have joined because they think it is the smart thing to do. Some of them own high-priced cameras but never make prints and are very irregular in attendance. Should they be crowded out? By all means, NO! Just keep them coming, because after all, print makers do need an unbiased and appreciative audience.

One way of encouraging full attendance is to have interesting programs to supple-

ment the print-making activities, not at every meeting perhaps, but often enough to keep up the interest of the whole group. And right here is where PSA comes in. The program material that we continually advertise in these columns is supplied to member clubs without profit and for the sole purpose of helping out when other interests lag. It is one of the many services the Pictorial Division provides.

You can have a talk by one of the country's celebrated photographers via tape recording, and that's something! Other activities are:

American Exhibits

In October, Fred Fix told me that all his exhibition-print shows were booked up until February, but by this time some of them may be available again. Write him for his latest list and tell him what dates you have open. Perhaps there will be something for you. For example, the shows dealing with the oil industry came in late and were delayed in starting. Maybe you can arrange for one of them. The pictorial as well as technical quality of these prints is very high.

Camera Club Print Circuits

There is always a chance to get in on a Print Circuit. Your club will be benefited by comparing its work with that of other clubs in various parts of the country. All a club needs to get started is a dollar and three prints. Write to William R. Hutchinson for an application blank. Then make one person responsible for the transaction and be sure that he has the three prints in his possession when the application is filed, for things may happen faster than you think.

Portfolio Clubs

In every PSA club somebody will be found who belongs to a portfolio circuit, and that suggests a possible source of program material. When my portfolio arrives, I take it to the local camera club so that others may share the thrill. If it comes at the wrong time, I have a special meeting called, for we are allowed to keep it only five days. Sometimes a special meeting on any pretext will wake up the boys.

The regular Portfolio Club movement is directed by Sten T. Anderson, APSA, and in the article that follows, he tells its story better than I can.

The Portfolio Clubs

STEN T. ANDERSON, APSA

For some time we have been writing about the function and operation of Portfolio Clubs. Of late we have received some letters, in which we find that the applicants erroneously assume that this "is just another camera club."

Decidedly, the Portfolio Club is not a "camera club." It was originated for the sole purpose of providing, for those who were serious in salon work, a means of viewing, criticizing, and profiting by having available greater numbers of prints offered by the Pictorial Portfolios.

The Pictorial Portfolios, in themselves,

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provide an excellent means of getting criticisms from the members and the commentator comprising the circle. Circulation of the portfolio consumes time and often the "eager beaver" is prone to be found champing at the bit waiting for the return of his portfolio. The only solution to this unavoidable circumstance was to sign up for more Pictorial Portfolios. It was because of this desire that the Portfolian activity was proposed.

In its simplest form, it is operated by having local participants of the portfolios assemble at the home of one of the members of the group every time a portfolio arrived, to see and comment on the contents. The next step consisted in organizing such groups under a definite plan. The first group was organized at Owatonna, Minnesota, Dr. Warren Roepeke heading up the activity. To further increase the benefits, sponsors were assigned to direct and collaborate with the work, thus providing the know-how of experienced salon exhibitors.

Your present Director, after taking over the work started by Dr. Roepeke, was faced with the objection that the Portfolian Club (through the title it had at that time, "Portfolio Camera Clubs") was usurping the province of the local camera clubs. To overcome such an implied accusation, on March 1st, last year, the activity was re-christened "Portfolian Clubs" to more specifically define its work. At the same time, the entrance requirements were eased to overcome objections raised by aspiring groups with insufficient PSA representation locally. The entrance quota of eight was reduced to four qualified members for organization of a Portfolian Club. A further proviso was that when the group had reached a membership of six, a sponsor would be assigned to further help them in their work.

These changes have increased the interest in Portfolian Clubs, and requests for information come from all parts of the country, which presages a substantial increase during the fiscal year.

As we have pointed out, the primary function of the Portfolian Club is to provide a means for intensive study of prints in the Pictorial Portfolios; and secondly, to develop the pictorial abilities of its members through local work on assigned subjects which in turn are evaluated by the sponsor, for further study and presentation. One has but to go through the process of organization of a Club and attend a few meetings to realize just how much this activity aids the striving amateur. Perception of flaws in prints becomes keener, desire to excel is enhanced and on the whole the member undergoes a transformation, with ability to judge, profit and exercise care coupled with thought in the production of his offerings.

These are not just idle statements but factual recommendations for the desirability of participation, by interested groups, in Portfolian Clubs. To those groups who aspire to more enjoyment and appreciation of good photography we unhesitatingly urge that they avail themselves of the opportunity to join and we extend an invitation to contact the Director of the activity

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PSA Recorded Lecture Program

The Recorded Lecture Program of the Pictorial Division offers the following programs for your club.

No. 1. An Analysis of Recognized Salon Prints by Ragnar Hedenvall, APSA

No. 2. Commentary on Recognized Salon Prints by Morris Gurrie

No. 3. Outdoor Photography by D. Ward Pease, FPSA

No. 4. Still Life by Ann Pilger Dewey, APSA, Hon. PSA

No. 5. New Prints for Old by Barbara Green, APSA

SPECIAL Photography of the Nude by P. H. Oelman, FPSA

A deposit of \$25.00 should accompany an order. A service charge is made for each Lecture. The SPECIAL costs \$10.00 and should be ordered directly from Mr. Oelman. For clubs which are members of PSA but are not affiliated with the PD the charge is \$6.50. Clubs which are affiliated with the PD will be charged \$5.00. Clubs or groups not members of PSA will be quoted prices on request to the Director.

For Nos. 1 to 5 order from Philip B. Maples, Director, Recorded Lecture Program, 29 Spring Street, Brockport, New York.

For the SPECIAL please contact: P. H. Oelman, FPSA, 2505 Moorman Avenue, Cincinnati 6, Ohio.

who will provide information and application blanks.

A New Director

It is with pleasure that we announce the appointment of Fred Bauer, Jr., of Memphis, Tennessee, to serve as the new Director of the Camera Club Print Judging Service. If your club is interested in securing an unbiased evaluation of their prints, contact Fred for the name of a competent judge close to you. His address is in the masthead on the second page of this section.

INTERNATIONAL CLUB PRINT COMPETITION

ROBERT J. LAUER, Director

The Point System

This month's competition is being held at Rochester, N. Y., under the sponsorship of the Kodak Camera Club. Because of the time lapse between actual judging and publication of the PSA JOURNAL, it is impossible to give full details of the judging in this column immediately following each contest. However, all participating clubs receive an individual report within two weeks of the actual judging.

There have been some questions regarding the point system which determines the

rank of the camera clubs. There are two classifications, A and B, in which a club may choose to compete. Class A consists of the larger clubs, and the more active smaller groups. Class B is designed for the clubs which desire to start out slower, and work up toward the tougher competition encountered in the more advanced group. At the end of the year about 15% of the B group is advanced to Class A.

During the judging all prints are scored on the same basis, there being no breakdown into A and B. A minimum of one point is scored for each print entered, with a maximum ten points possible. (Each club may enter four prints, but not more than two from any one member.) The judges rate each print according to its merit on this basis. A really top-notch print appealing equally to all three judges could possibly score a full 30 points. This would be rare, however. The outstanding prints in each competition usually run from 20 to 25 points. The October first place winner, "The Philosopher," by Sam Cohen of the Oakland Camera Club won with 23 points. Actually, there will be a slight variation among the various juries, which is only natural—that is why it is necessary to contribute the best to each contest.

Although the total scores can vary several points each month, all of the clubs are in the same relative position, as long as they keep submitting good prints. Allowing ten points in the evaluation of a print, the better ones are built up to a higher score, and there is enough leeway in the middle brackets to eliminate continuous ties.

After prints are scored, from one to ten points, the totals are entered on the club's entry form. While the prints are returned immediately to the participating clubs, the entry forms are forwarded to the Director of the International Club Print Competition, Robert J. Lauer, for preparation of the reports sent out to each club immediately following the contest.

Trophies are awarded to the top scoring clubs in each class and medals are given to the top three individual winners.

Next month we will report the results of the December competition, held at Oklahoma City under the sponsorship of the Oklahoma Camera Club. The results of the February judging will appear in May.

October Competition Results

Here are the scores of the clubs which participated in the October competition:

CLASS A

Oakland CC—70; Baltimore CC—58; Photo Pictorialists of Milwaukee—53; Academy of Science & Art (Pittsburgh)—51; Science Museum (Kenmore, N. Y.)—49; Tiro de Los Padres (Halcyon, Calif.)—46; Berkeley (Calif.) CC—45; Grange Pointe CC—45; Jackson Park (Chicago)—45; Western Reserve (Cleveland)—45; Niagara Falls CC—44; Shorewood (Milwaukee)—44; Delta CC (New Orleans)—43; Ft. Dearborn (Chicago)—43; Photo Guild of Detroit—43; St. Louis CC—40; Blackhawk (Iowa) CC—38; Rock Island (Ill.) CC—38; Venango (Goli City, Pa.) CC—38; Queen City Pictorialists—37; Green Briar (Chicago)—36; Lawson (Chicago)—36; Memphis CC—36; Germantown (Philadelphia)—33; and San Luis Obispo (Calif.)—33.

CLASS B

Mission Pictorialists—37; Orleans CC—46; Maywood (N. J.)—43; Atascadero (Calif.)—39;

Bell CC of Denver—39; Erie (Pa.) Photographic Society—38; Endicott (N. Y.)—36; Saskatoon (Canada)—36; Ft. Steuben (Steubenville, O.)—35; Mysore Photographic Society (India)—35; Tripod CC (Dayton)—35; Waterloo (Ia.) CC—35; Oklahoma CC—34; Oswego (N. Y.) CC—34; Balco (Rochester) CC—33; Bartlesville (Okla.)—33; Bremerton (Wash.)—33; Mid South (Memphis)—33; Sioux Falls YMCA—32; Albany CC—30; Central Florida CC—29; Ogden (Utah) CC—29; Richmond View Finders (Calif.)—29; Tucson CC—29; Keene (N. H.) CC—27; Independence CC (Mo.)—26; Lewis Clark CC (Washington)—26; Spokane CC—26; Portland (Maine) CC—25; Southern Ohio CC (Cincinnati)—22; Boulder City (Nev.)—21; Stillwater (Okla.)—21; Silver Bow (Montana)—20; Federal Reserve (Richmond, Va.)—17.

VIEWS AND REVIEWS

BY THE EDITOR

This Above All

So you're not getting anywhere in the exhibitions! You make marine pictures that rival those of John Hogan and Aubrey Bodine (at least you think so), you take architectural shots that will stand up in any exhibition with Frank Heller's work, and you've even journeyed to a picturesque factory down on the outskirts of town to do some industrial pictures a la Doris Martha Weber. But still you aren't getting anywhere in the exhibitions.

Of course, when your friends spot some unusual character and ask for help in taking his picture—now that is the thing you like. But what jury takes this kind of thing in an exhibition, you ask. Sure, you're crazy about taking interesting, imaginative character pictures—but, gee gosh, none of the other super-duper picture makers do that kind of thing, it's a bit out of style now, so if you're going to make a big exhibition record (you say to yourself, sorrowfully), you'd better go out and struggle to make the kind of pictures that the Four and Five Star Exhibitors turn out all of the time.

In other words, you've tried imitating the more prolific salon exhibitors, and their subject matter leaves both you and the exhibition judges you've submitted to very cold. All you seem to get is lots of big zeros.

Why?

Who am I to tell you why your prints don't click with certain judges (I find the same prejudiced point of view toward some of my efforts).

But there is one thing I am sure of—as sure as I am of anything—and that is that if you are taking a picture which is not of interest to you, that picture will not be one of your best. For to be the best work of which you are capable, it must have that indefinable spark which conveys to the viewer as well as to you that this picture is something which had to be taken because it meant so much to you that you had to share it.

Yes, imitation is a good way to get started. But if you imitate to create, as was suggested last month, imitate wisely.

Don't use subject matter in which you have little interest just because someone has done well with it.

Be yourself. Choose the things you are interested in to picture. Imitate if you will—imitate wisely, but never cease to express yourself in your own way. Don't do things because everyone else is doing them. It was true in Shakespeare's day—and it is equally true now and for the time of the future—"This above all: to thine own self be true."

If you are true to yourself, your personality cannot help but shine from all of your pictures—and you will have achieved greatness in your own niche.

STELLA JENKS

Coming Salons Agreeing to Follow PSA Recommendations

Note: M-monochrome prints, C-color prints, T-color transparencies, SS-stereo slides, L-monochrome slides, A-architectural prints, S-scientific or nature prints. Entry fee is \$1.00 in each class unless otherwise specified. Recognition: The monochrome portions of salons listed have Fictorial Division approval. Check salon list of appropriate Division for recognition of other sections.

Wilmington (M,T) Exhibited Feb. 5-25 at Wilmington Society of Fine Arts. Data: Wm. M. Anderson, Delaware Camera Club, P. O. Box 401, Wilmington, Delaware.

Minneapolis (M,C,T) Exhibited Feb. 3-17 at American Swedish Institute. Data: Warren Anderson, 123 S. 7th St., Minneapolis, Minn.

Valparaiso (M,C) Exhibited Jan. 30 to Feb. 28 at Casino Municipal de Vina del Mar. Data: Club Fotografico y Cinematografico de Valparaiso, Avenida Pearce Montt 1740, Valparaiso, Chile.

Birmingham (M,T,L,S prints and transparencies).

Exhibited Feb. 9-23 at Royal Society of Artists. Data: E. H. Cochrane, 142 Swanshurst Lane, Moseley, Birmingham 14, England.

Circle of Confusion (M,T) Exhibited Feb. 10-24 at Art Gallery. Data: Arthur W. Maddox, 10200 Orange St., Norwalk, Calif.

Rochester (M,C,T,S, Documentary prints in M or C, large transparencies) Closes Feb. 14. Exhibited Mar. 7-30 at Rochester Memorial Art Gallery. Data: Dr. Robt. F. Edgerton, 11 Fireside Drive, Rochester 18, N. Y.

Philadelphia (M,T) Closes Feb. 16. Exhibited Mar. 8-30 at Free Library. Data: Miss Marion C. Knight, 1123 Harrison St., Philadelphia 74, Penna.

Worcestershire (M,T) Closes Feb. 20. Exhibited Mar. 15 to Apr. 5 at City Art Gallery. Data: C. J. Morrall, 57 The Tything, Worcester, England.

St. Louis (M,T) Closes Apr. 25. Exhibited May 10-22. Data: Miss Jane Shaffer, 5466 Clemens Ave., St. Louis 12, Mo.

Cincinnati (M) Closes Apr. 26. Exhibited May 7-21 at Art Museum. Data: Raymond E. Riedinger, 3875 Kirkup Ave., Cincinnati 13, Ohio.

Other Salons

Adelaide (M) Exhibited Mar. 7 to May 3 in Royal Adelaide Exhibition. Data: A. C. Willcox, 12 Pirie Street, Adelaide, So. Australia.

Charlott (M) Closes Feb. 28. Exhibited Apr. 13 to 27 at the Bourse. Data: Roger Populaire, 18 rue J. Desre, Charleville, Belgium.

So. African (M) Closes Mar. 15. Exhibited May to August at Johannesburg and leading cities. Data: Peter Marples, P. O. Box 7024, Johannesburg, So. Africa.

First International Exhibition of the Associação Brasileira de Arte Fotográfica (M), Rio de Janeiro, Brazil, June 14, 1955. Closing date—March 30, 1952. Entry forms for Canada, Mexico and USA from Ray Miss, 1800 N. Farwell Ave., Milwaukee 2, Wisconsin or Rua Santa Luzia 173, conjunto 705, Rio de Janeiro, Brazil.

PSA NATURE DIVISION

HARRY R. REECH, APSA

286 Schenck St., No. Tonawanda, New York

THE Fourteenth Buffalo International Exhibition of Nature Photography. Sponsor—Science Museum Photographic Club. Last day for receiving prints and slides—April 22, 1952. Judging date—April 26, 1952.

For information or entry forms address inquiries to Science Museum Photographic Club, Buffalo Museum of Science, Humboldt Parkway, Buffalo, New York.

Nature Represented in Tops Show

The PSA "Tops in Photography" show which opened in January and is scheduled to make several appearances in the south and west is truly what the title implies, namely, the tops. The Nature Division is well represented in this show. It includes fifty prints and sixty slides, the best work of some of the top nature photographers in this country and Canada. While the subject matter of both prints and slides is strictly nature material, the pictorial quality and appeal is such that the nature section of the show offers stiff competition to the pictorial section.

I would recommend to all nature enthusiasts that if this show is scheduled for

your section of the country, you make every effort to see it as it will make you feel a just pride in your chosen field of photography. Needless to say you will also be helping to make the "Tops" show a success.

Nature Division Growing Rapidly

It is truly gratifying to the executive committee of the Nature Division to note the rapid growth of the Division during the past year. The committee feels that the member-body of the Division would be interested in the fact that during the three months of September, October, and November 1951, eighty-one new members enrolled in the Division. While this figure might not appear too great at a glance, when one stops to consider that this represents sixteen percent of the entire enrollment it immediately assumes a greater significance.

This increased enrollment in the Nature Division could be due to a general increased interest in nature photography or it might be due to other reasons. The executive committee, however, is not going to concern itself with the reasons for the

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stimulated growth nearly so much as it is with keeping the membership interested and in this way reduce the mortality rate in the Division.

Ways and means for stimulating interest and for broadening the program of the Division are presently being considered and it is hoped that some announcements can soon be made. It might be told that a west coast group is interested in sponsoring a new nature exhibition, and another international exhibition is considering adding a nature section to their exhibition. Two additional nature exhibitions would give added impetus to our growth.

Some consideration is being given to the establishment of an interclub nature print contest, somewhat like the Color and Pictorial Divisions are conducting. The writer would like to hear from the clubs affiliated with the Nature Division, and for that matter from any club affiliated with the Society. Several camera clubs have already indicated and specified an interest in such a competition. If there is sufficient interest displayed by affiliated clubs, it could be arranged to conduct an interclub contest next year.

Nature Contest Rules Clarification

Just prior to the January Nature Print Contest a query was received from a camera club with Nature Division affiliation, anent the contest rules. In view of the nature of this question it might be well to repeat it here.

Our club has joined PSA as an organization with Nature, Pictorial, and color affiliations. Your contest rules stipulate limit of four prints per individual. Just how does that affect us?

Can we send four prints, honors to go to the club? No fee.

Are we, as a club, ineligible?

Can each member send four prints and pay fifty cents entry fee?

Is your contest only for individual memberships?

Just what do you mean by non-members? In other words, can any outsider at all enter just for fifty cents, with no PSA affiliation?

The contest is for individuals and is not a club activity so only individuals are eligible. Honors therefore are issued to individuals only. Rule #2 indicates a limit of four prints per person, which means that every member of a club can submit four prints if they so choose. As the contest is for individuals rule #7 would cover individual members of the Nature Division and would indicate that there is no fee for members of the Division. The second sentence in rule #7, which states that for all others the cost is fifty cents for each contest, would indicate that any individual was eligible to submit prints with the only stipulation being that there is an entry fee of fifty cents for any individual who is not a member of the Division. This would answer the question as to what is meant by non-members and would also indicate that any person is eligible whether he be a PSA member or not.

We thought it best to cover this matter in the Nature Column in case any other camera club might have questions.

PSA COLOR DIVISION

GEORGE F. JOHNSON, APSA

Forestry Building, State College, Penna.

IN THE Color Division column of the October 1951 issue of PSA JOURNAL, Mrs. Vella L. Finne told us of her pleasure and experience in getting together a group of slides for the CD Hospital Project. Now through the kindness of the American Red Cross in Tokio, in supplying us with a copy of a letter written to Mrs. Finne, we are able to give you the other side of the story. We quote from this letter written by Mrs. D. V. Armstrong, Chairman, Community Service to Hospitals, American Red Cross to Mrs. Finne:

"As we in our Tokyo Volunteer Red Cross Headquarters went through the latest boxes of color slides sent to us through Mr. Baumgaertel of the PSA, your name appeared so frequently as a donor that we want to send you our personal thanks on behalf of our hospitalized servicemen.

"Not only was your contribution exceedingly generous but amazingly beautiful. When I look outside at our raw and rainy weather and think of our United Nations servicemen who are lying in hospital beds here in Japan and in Korea, I am deeply grateful to you and your friends for providing them with the many bright hours of entertainment they have enjoyed through your collections of color slides.

"The bulk of our slides are being sent to Korean Field Hospitals but as the word gets around we are being besieged with requests from other hospitals in the Far East Command, so there seems to be no limit on the amount we can put to good use.

"Our hospitalized United Nations servicemen would, if they could, join me in saying "thank-you" in a dozen different tongues for this is a donation which has broken the language barrier and helped immeasurably with the recreational facilities available to them."

At the time of writing Mrs. Finne was responsible for the receipt by us of more than 5000 slides, several thousand of which came out of her personal files. Not all of us can secure slides in such quantities. It should therefore be understood that any slides at all that can be contributed, even if it is only one single slide, will be deeply appreciated and will give a lot of pleasure. If possible, slides should be identified as to locale or subject. This identification need not be elaborate.

Karl A. Baumgaertel, APSA, who handles the project, will be away on a trip for his health during February and early March so get your slides together now, identify them and sometime soon after March 15th mail them to Karl A. Baumgaertel, APSA, 353-31st Avenue, San Francisco, California. Although Mr. Baumgaertel will be away for a period of time

there will be no cessation in our service to the Army, Navy and Veterans Hospitals in both this country and the far east, as arrangements have been made to keep the hospitals supplied with the more than 5000 slides a month they are now receiving.

"Scores"

Those of you who always seem to get the low scores in PSA National Contests probably think the judges are ogres who pounce gleefully upon each slide, especially yours, and tear it to shreds.

This is not true. Persons who are chosen to judge your slides are selected because they have earned a reputation for outstanding achievement in photography. Once, they were beginners and amateurs just like you. They are conscientiously interested in helping you toward the same success. They would prefer to give you a higher score.

Success in photography is never a matter of luck. You must earn your laurels.

Unfortunately, the great number of entries do not permit judges to take the time with each slide necessary to give detailed suggestions for improvement.

For you who live in districts where there are few qualified photographers who can give you personal advice, it is discouraging never to learn just why your scores remain in the lower bracket.

Perhaps a better understanding of how PSA contests are conducted and how scores are determined will enable you to raise your score in future competitions.

All PSA color contests are judged by a panel of three judges. Each judge must award from one to four points to each slide. These points are based upon: (1) Composition. (2) Interest Value. (3) Technique. Authorities on all creative endeavor agree that there is seldom anything created by man that cannot be improved. This is why few slides receive four points from any one judge and why the maximum total of twelve points is seldom awarded.

If your slide received a low score of from three to five points this indicates that each of the three judges considered your slide inferior for one or all of the reasons named.

By the law of averages, it is seldom that all three judges could be wrong.

Let us analyze a hypothetical total score of four points. To arrive at this score two of the judges had to vote one point each with the third voting two points.

This would mean that one judge believed the slide to be poor only in Composition, or Interest Value, or Technique. Therefore he gave it two points.

It would show that the other two judges decided the slide was poor in two of these

qualities consequently awarded it only one point.

Naturally, none of them included that extra point for 'near perfection'.

By similar analysis of each score, you can determine how the judges voted.

Study your slide. You should be able to discover whether it failed in Composition, Interest, or Technique.

In future columns I shall take up each point and attempt to help you to a better score.

Remember, you are competing with the finest when you enter any group in a PSA National Contest. It is up to you to determine how high your slide will rate by sending the best it is possible to make.

VELLA L. FINNE

Foreign Exchange Sets

To enable American slide makers to see the work being produced elsewhere in the world, and for foreign workers to see American slides, the International Slide Set Exchange was set up by the Color Division in 1947.

The plan works this way: The Color Division sends a set of 50 slides to a foreign cooperator and receives a set of 50 slides in exchange for circulation to camera clubs in the United States. After quite general circulation, the sets are returned.

Many foreign countries have cooperated in the past. To continue this service with maximum efficiency, the Color Division is anxious to hear from individuals or camera clubs in foreign countries who have or can prepare sets for international exchange. Correspondence should be addressed to the Color Division Supervisor, F. B. Bayless, 320 Cowell Avenue, Oil City, Pennsylvania, U. S. A.

New Members

New members in the Color Division during one recent month totalled 164, representing 28 different states, District of Columbia, and seven foreign countries. The eight leading states in this total were California, Michigan, New York, Illinois, Pennsylvania, New Jersey, Ohio, and Oregon. New Zealand led among the foreign countries.

Have you tried to interest others in PSA and Color Division membership? A lot of CD members are doing it and enjoying the experience. Why not try it?

First Stereo Competition

The interest and response to the first stereo competition sponsored by the Color Division, was most gratifying according to a report from George W. Blaha, supervisor. There were 14 entrants with a total of 53 slides. Judges were Dr. Frank E. Rice, APSA, Earl E. Krause, and George W. Blaha, APSA.

Winners were as follows:

- 1st—"Sea Gull Parade"—Henry C. Crowell, Winnetka, Ill.
- 2nd—"Willemstad Dock"—Mrs. Charles R. Walgreen, Chicago.
- 3rd—"Lady News Vendor"—Wayne J. Brown, San Francisco, Calif.
- 4th—"Trees and Falls"—Julius Wolf, Chicago.

Honorable Mentions:

- "Windjammer"—Henry C. Crowell, Winnetka, Ill.

"Ambitious Bush"—L. B. Dunnigan, Royal Oak, Michigan.

"Birch Trees"—W. C. Miller, Queens Village, New York.

The closing date for the next contest is February 20, 1952. Send your slides to George W. Blaha, 4211 Harvey Avenue, Western Springs, Illinois.

EDITORIAL NOTE:—As has been previously announced, a Stereo Division has been created by action of the PSA Board of Directors. This stereo competition is one of several activities sponsored in the past by the Color Division which will be transferred to the new Division as soon as it is fully activated.

Mount Your Slides

The Color Committee of the Photographic Guild of Detroit has taken a progressive step in ruling that all slides for Guild competitions must be mounted in glass and spotted.

Leonard A. Thurston, Color Chairman of the Guild, reviews the reasons for this ruling in a recent issue of Photo Guild Bulletin:

Your color committee has requested that you mount your slides in glass, and spot them for Guild competitions. There are several sound and basic reasons back of this request. It might be in order to review them.

The Photographic Guild of Detroit has a reputation to uphold. It has always taught its members the rules that a good and successful salon exhibitor must practice. Both print and color slide nights are planned for more than entertainment; the primary purpose is to train you to better pictorialism, and to prepare the new members for the exhibition circuits; also to keep the older members from getting lazy. It is for this reason that no print will be accepted for judging unless it is properly mounted on a 16"x20" mounting board. This is also one of the reasons that no slide will be considered unless it is properly mounted in glass, and spotted in the lower left hand corner when held right side up.

Another reason is to save the projectionist trouble. Prints do not go up on the easel upside down, or wrong side to. Why should the projectionist who must work in the dark be allowed to guess? The result may be the first presentation of your slide upside down. If this happens to your slide it may lose that first impact that is so necessary to a good slide. Impact will often put a slide into the win column. The very first impact carries more shock. Do not lose it by improper spotting.

Another thing your officers recognize, but which you may not have thought much about: your prize slides are more valuable than the best black and white prints. You cannot duplicate a damaged slide; you may not even be able to duplicate faithfully an undamaged slide. A prize print can readily be duplicated from the original negative, and by the maker. Can you duplicate any of your slides from the original transparency? Your

officers do not want to run the risk of damaging any of your slides; it could be a prize one. Remember it is easier to have an accident with an unmounted slide.

There is also the matter of focusing. Mounted slides usually require little focusing. Once focused they stay put. Unmounted slides do not stay all over sharp. If the projectionist is just a little careless your sharp slide may be thrown out because the judges considered it soft. The Color Committee want you to receive all the consideration to which your efforts are worthy.

It is hoped that this will clarify the stand taken by your officers. The only exceptions will be visitors, and first-night members. All others will turn them in properly mounted and spotted.

Seeing Color

When one considers the burgeoning growth of interest in color, it is not surprising to note the disposition to be critical of the camera's rendition of certain colors. Indicative of this was a conversation the writer heard recently, when two embryonic color enthusiasts heatedly argued over the "correctness" of some colors in a transparency.

Now it must be admitted that before one is qualified to evaluate any degree of nuance in a hue—or color—they should first develop an ability to see colors objectively. This ability, naturally, does not come to anyone overnight, nor is it taught in "five easy lessons," for the "seeing" of color more accurately is the result of training, study, and experience, with the rate of progress dependent upon one's love of color, energy and determination.

The artist is a good illustration of this for experience has taught him to see objects, not as he knows them to be but as they appear to be. Certainly the artist knows that the distant hill is covered with green grass, yet he paints it in a soft violet for that is how it appears, and that is how the objective eye of the camera perceives it.

Consider the difference between the human eye and that of the camera. The former "sees" objects and scenes by way of a brain that is tremendously influenced by personal likes and dislikes, misinformation regarding the science of color, imperfect vision, and subconscious psychological reactions to certain hues. On the other hand, the lens is objectively mechanical and interprets what it "sees" only within the limitations of the sensitized film. This does not imply that the camera's eye is the ultimate in color rendition, for it is not, but placed in the hands of one who understands his camera and his medium, the results will more readily impress the competent judge of color.

Let's not fall into the error of adjusting the camera's eye to conform to our limited sense of color evaluation. It will pay big dividends eventually.

JAMES H. ARCHIBALD

Coming Color Exhibitions

Philadelphia, March 8-30, deadline February 16. Four slides, \$1. Forms: Clarence A. Rosman, 1637 S. 54th St., Philadelphia 43, Pa.
Rochester, Mar. 7-30, deadline Feb. 14. Four slides (including 234), \$1. Forms: R. F. Edgerton, 11 Fireside Dr., Rochester 18, N. Y.
San Francisco (Photobromers), Mar. 15-22, deadline Mar. 1. Four slides, \$1. Forms: B. H. Ladensohn, 3140 Clay St., San Francisco 15, Calif.

El Cerrito, Apr. 29-May 30, deadline Apr. 17. Four slides, \$1. Forms: George E. French, 3877 Olmsted Ave., Los Angeles 8, Calif.

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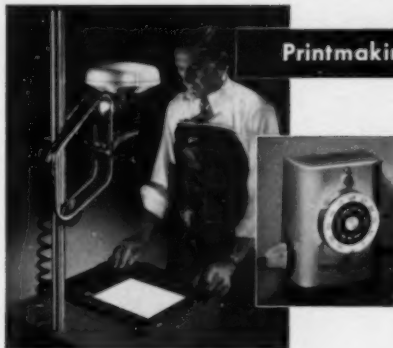
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Whether you are just about to equip a darkroom or want a piece of equipment for a very specialized application, your Kodak dealer is ready to show you Kodak equipment that is exactly matched to your needs. For example—

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Enlargements that really sparkle are yours with a *Kodak Fluorolite Enlarger*. Reflected "cold" fluorescent light gives high printing brilliance and superb contrast for easy focusing. Plenty of other features, too, add enjoyment to your darkroom hours . . . simultaneous elevation and focusing . . . distortion control, through rotating and tilting negative carriers . . . superior rigidity, with a 40-inch steel column deep-anchored in the big lighttight cabinet base . . . plus adaptability to use as a camera. With one negative carrier, less lens, \$96.40.

For a lens, you can choose a *Kodak Enlarging Ektar Lens* or a *Kodak Enlarging Ektanon Lens*, 50mm., 3-inch, or 4-inch, \$14 to \$49.90. The Ektar lenses, the finest obtainable, are recommended for the most critical work, in black-and-white and color. Both Ektanon and Ektar lenses are *Lumenized*. If you do a lot of enlarging you will want the *Kodak Electric Time Control*. Set your printing time—from 1 to 57 seconds—and plug the enlarger into the unit. At the end of the printing period it turns your enlarger off automatically—and will repeat the operation as many times as you wish. Continuous light for focusing. No clock watching, and both hands are free. Price, \$13.50.

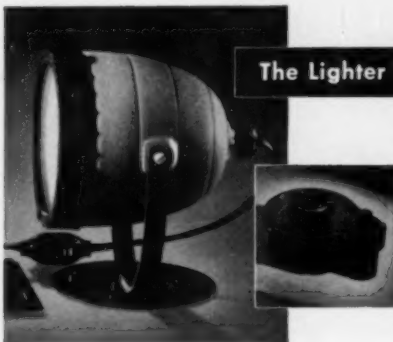
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With *Kodak Photographic Chemical Preparations* you are always sure of the right solution. You merely add water to these specially mixed, Kodak-tested compounds. You save work and gain time for more creative darkroom pursuits. Whether you are using *Kodak Dektol Developer* with its 20% greater print capacity than D-72, its 50% better keeping qualities, and its excellent development rate, or *Kodak Fixing and Stop Baths*, *Toners*, *Intensifiers* and *Reducers* . . . you will find them all of the same fine quality, uniform from batch to batch.

If you prefer to mix your own special formulas, you will appreciate the precision help of the *Kodak Chemical Scales*. Marked for both avoirdupois and metric systems, a hair-line indicator makes accurate reading easy. Avoirdupois weights are supplied. Tenite pans have lips and handles shaped in. \$9.90.

The Lighter Side



If you want to develop your 35mm. films without fumbling around in the dark, a *Kodak Day-Load Tank* is the answer. Loading, developing, and fixing can be carried out in full daylight. Price, \$9.85. When it comes to printmaking and the other darkroom operations, you will want light that's adequate to see by, but safe for your light-sensitive materials. The answer here is a *Kodak Safelight*. The *Kodak Adjustable Safelight Lamp*, pictured at left, can be attached to wall, shelf, or bench. Adjustable bracket can be angled to any desired position. With a $5\frac{1}{4}$ " Series 0A Wratten Safelight, \$7.05. The *Kodak Utility Safelight Lamp*, Model C, is designed to provide ample over-all darkroom illumination. Made for ceiling suspension, it gives indirect light through a 10 x 12 Wratten Safelight. With chains for easy ceiling hanging and a Series 0A Filter, \$12. A wall bracket may also be obtained for \$1.85.

**And for any other darkroom need—
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Kodak

Experts' Choices For Fine Prints

BERNARD G.
SILBERSTEIN,
FPSA—FRPS



No. 2 of an informative series on how leading exhibitors choose papers to fit their salon aims

"FULL SAIL" (on facing page) has hung in forty-three leading salons—and has never been rejected. In his exhibition print, Mr. Silberstein required a vigorous interpretation; a full, brilliant tonal scale from clear highlights to richest darks; a sparkling surface adaptable to retouching; and an emulsion amenable to toning. He chose a long-time favorite, *Kodak Illustrators' Special*—a fine reproduction paper, beloved by professional photographic illustrators whose work

must survive the most critical appraisal and justify prices in three and four figures.

Mr. Silberstein likes not only the exceptional image quality of *Illustrators' Special*, but also its lustrous fine-grained "E" surface, which retains a broad, brilliant tonal scale without the specular reflectance of glossy stock. He also feels that, when toned in his favorite gold-thiourea formula, *Illustrators' Special* yields a finer blue tone than any other paper.

FINE EXHIBITION PAPERS, such as *Illustrators' Special*, *Kodak Opal*, and *Kodak Ektalure G*, are relatively low in speed. Many meticulous workers prefer this moderate speed—it allows more time for dodging and local printing. For those whose standards are also high, but whose darkroom time is limited, there are excellent high-speed alternates in the Kodak line of fine papers. *Kodak Medalist Paper*, warm-black, and *Kodabromide*, cool neutral-black, are about six times as fast as *Opal*. *Kodak Platino*, warm-black, is intermediate in speed. All of these papers offer an excellent choice of print surfaces, and grades for both "soft" and "hard" negatives. The small reproduction of Frank J. Heller's "Eucalyptus" (to appear full-page later in this series) is on *Kodabromide F*.

TEXTURE, OR NONE? It depends on your aim—and there's a Kodak paper to fit every interpretive need. For "Pattern Motif 283," at right, Axel Bahnsen chose glossy *Kodabromide F*. His print will appear full-page later in this series. In addition to glossy, Kodak papers offer the discriminating exhibitor many other valuable surface textures—smooth lustre, fine-grained, rough lustre, silk, suede, tapestry, tweed, and others—and white, cream white, and rich old ivory paper stocks.

Know your Kodak papers, for knowledge spells success. For fine exhibition enlargements, gift prints, home decoration—choose from warm-black *Medalist* and *Platino*, brown-black *Opal*, *Ektalure G*, and *Illustrators' Special*, and neutral-black *Kodabromide*. For special applications, *Kodak Mural R*, *Resisto Rapid N*, *Opalure Print Film*, *Translite Paper*. For contact prints, *Kodak Azo*, *Velox*, *Resisto N*, and others. Your Kodak dealer has full details.



Kodak
TRADE-MARK

EASTMAN KODAK COMPANY, ROCHESTER 4, N. Y.



"Full Sail," Bernard G. Silberstein, Cincinnati, Ohio. Negative $2\frac{1}{4} \times 2\frac{1}{4}$, on Kodak Super-XX Film, Kodak Wratten G Filter, $f/9$, $1/100$. Exhibition print on Kodak Illustrators' Special (moderate-speed, brown-black, with a special fine-grained lustre surface on pure white stock). For the basis of Mr. Silberstein's choice, see facing page.

BOOK REVIEWS

LUCKY, THE FAMOUS FOUNDLING, by Nina Leen and Ray Mackland, A. A. Wyn, Inc., New York, N. Y., 94 pages, 8 x 10 1/4, illustrated, cloth, \$2.00, 1951.

This is a photographic book about a dog. Also, it is a dog book about photographs. Dog-lovers who like cameras, or camera-users who like dogs, will find it equally delightful and will feel themselves well repaid for investing the cost of admission in so enjoyable a treatise on canines and cameras.

"Lucky" is a dog who was found, as a puppy, beside her dead mother in the Texas Panhandle. She was air-expressed to Nina Leen, a "Life" photographer, at New York, and embarked upon a canine career which brought fame to her, new delights in the camera to Nina Leen, plenty of magazine and newspaper copy, and a text-writing job for Ray Mackland. Leonard McCombe, a "Life" photographer, gets into the book, too, as the discoverer and co-photographer of "Lucky."

This book presents a precious dog's-eye view of life, using both camera and text for the unique job. Whether the photographs are "salon clichés," as the modernists say, or of "modernistic tripe," as the salonists retort, escapes the reader. The pictures are photographs which carry the viewer along from one dog thrill to another, with the text serving as commentary.

Those who are interested in what can happen to an extremely fortunate canine had better get the book and find out. Those who wonder how a series of interesting photographs can be made from one subject can study the 114 shots of "Lucky"

and get an excellent course in picture-making at less than two cents per picture. Also, they'll start thinking about the real possibilities of the camera.

THE BOOK OF CATS, edited by Brant House, A. A. Wyn, Inc., New York, N. Y., 100 pages, 8 1/4 x 12, illustrated, cloth, \$2.00, 1950.

From a small-animal point of view, this world is inhabited by two kinds of people—cat people and dog people. This book happens to be for cat people, and photographers. Actually, it is the photographers' book about cats. Not necessarily top-flight, big-name photographers, but lots of photographers, men and women, amateurs and professionals. They have stalked and snapped the cats in a multitude of places and activities; cats as kittens; cats as cats; and cats as people, almost.

This book is comprised almost entirely of photographs, hundreds of them, each given a snappy title to produce a good laugh. Amateur photographers can enjoy this book, get a few laughs, then start some serious thinking about breaking out the camera and stalking the nearest cat. Only one subject here, the cat, yet treated so interestingly in so many different ways, and so well, as to prove for all time that the camera certainly isn't monotonous. Cats definitely aren't monotonous. The trouble must be with people!

Grand book for cat folks and camera folks, and, for cat-and-camera folks, positively "must" reading.

FUNDAMENTAL MECHANISMS OF PHOTOGRAPHIC SENSITIVITY, Edited by J. W. Mitchell, Academic Press, Inc., New York, N. Y., 347 pages, 7x9 3/4, illustrated, cloth, \$9.50, June 1951.

This valuable technical volume presents

the proceedings of a conference on photographic sensitivity held at the University of Bristol, England, in March 1950, as the third of a series started at Liège in 1948 and continued at Zurich in 1949. It contains the texts of nearly 50 technical papers treating of physical properties of silver halides, production and properties of silver halide grains in photographic emulsions, photographic sensitivity, latent image formation, and nuclear track emulsions.

The amateur eventually will benefit by the end-products of this technical material. Meanwhile, the book is a first-class reference volume for the photographic technician, and particularly the technician interested in the theories and processes of image formation. It appears that numerous theories explanatory of photographic sensitivity and image formation have been developing with the growth of man's technical knowledge. Some of the theories are acceptable to some of the technicians, but no generally-acceptable theory has evolved as yet.

The editor, J. W. Mitchell, essays in one chapter to present critical accounts of the situation from a post-conference point of view. He outlines the evolution of scientific thinking on the subject, beginning with the Gurney-Mott theory of 1938, and reviewing present and prospective lines of thought. He explains present belief that the phenomenon is, like the theories, much more complicated than originally was supposed, and reports that while present conclusions appear to coincide with photographic experience, further experimentation and interpretation is necessary.

Each of the nearly 50 technical papers in this book comprises a step toward improved photographic films, developers, processes. The volume constitutes a worthy contribution to photography's technical literature.

Johnny Appleseed's Correspondence

Flushing, N. Y.

DEAR JOHNNY:

I would like to add some personal comments on a phase not covered by your interesting "How To—Make Marine Pictures," namely, taking marine sunrises.

If you can wake yourself about 4:00 AM, you have possibilities of getting some beautiful and interesting pictures. Naturally, successful marine sunrises require the sun. In addition, the rising sun should be partially obscured or subdued by fog, haze, or ribbons of clouds. With a bald sky, the sun pops up in a minute—one shot—and its too bright to shoot in the direction of the sun.

I like pan film, using a lens shade, no tripod and no filter. Exposures run from f/8 to f/11 at 1/50 on Plus-X. If you want to use an exposure meter, I've gotten good results by pointing the meter at the water, right angles to the direction of the rising sun. Cut the film development one third. On most shots, use of the hyperfocal distance will speed things up and be adequate. Shoot fast, from different viewpoints and include in addition to the sun, interesting foreground (waves, boats, etc.). With fog or clouds present, pictures can be taken for almost ten minutes, into the sun, without fogging film.

But remember, this adventure begins at 4:00 AM.

N

BARTON KING

DEAR MR. KING:

Thanks for your comments.

Have you ever speculated on the percentage of really good, top-

notch pictures made before 6:00 AM or after 6:00 PM? My guess is you'd find a high proportion. Most landscape and marine photographers work the wrong time of day, when sun is high.

JOHNNY APPLESEED, APSA

* * * * *

Trappe, Maryland

DEAR JOHNNY:

There is a problem that has been bothering me for some time and I have an idea that you can supply the answer, so here goes.

I sometimes use the following as a print reducer

A—10% Potassium Ferricyanide
B—10% Ammonium Sulphocyanide

To use:—

| | |
|------------------------|----------|
| Solution A— | 1—Part |
| Solution B— | 10—Parts |
| Water to make 50 Parts | |

This works fine in removing spots from gold toned prints and sepias as well as the well washed black and white. For spots I use less water. For large areas using the full dilution it seems much easier for me to handle than Farmers as it is not so jumpy. I expect you have used it, but my problem is just what is the proper after treatment. I have used alcohol as well as plain water but am uncertain as to the lasting properties after those treatments and am wondering if any other treatment is necessary. Do you have the answer?

THOMAS T. FIRTH

DEAR TOM:

I have never used the reducer you mention, but it seems safe to say that thorough washing is the only requirement for getting

a print with a permanent image. This means an hour or more in running water, with good circulation over the image and no more than two or three prints in the tray at one time. A similar technique is really needed for any reduced print, regardless of formula. No other treatment should be necessary.

Maybe someone who reads this comment can supply additional information from his experiences. JOHNNY APPLESEED, APSA

* * * * *

DEAR JOHNNY APPLESEED:

In the October issue of PSA JOURNAL (page 643) under the heading of Portfolian Camera Clubs I find the following phrase "mail order camera club member."

In fairness to 11 operating Portfolian Clubs I should like to know who coined this phrase which so incorrectly describes the work of this activity. Also I would like to know just what is the meaning of this.

Secondly, this activity on March 1st of last year divorced the "Camera" appellation in its title on the premise that we were not and did not presume to be a camera club.

In the period associated with growing pains of this comparatively new activity, we do not want to have a wrong impression go out relative to the function of the Portfolian Clubs.

As an extension of the Pictorial Division Pictorial Portfolios, the Portfolian Club groups portfolio participants in a local area or city for serious study of the portfolios received by their members. By grouping, the members have available a greater number of prints to evaluate and profit by than are afforded by the Pictorial Portfolio program. Meetings are held in the homes of the members whenever a portfolio arrives and the term "mail order" is a misnomer in every sense of the word.

We have just returned from the PSA Convention in Detroit where we appeared on the program of the Pictorial Division general meeting to explain the function and operation of the Portfolian Club activity and were chagrined, on opening our copy of the JOURNAL, to find the above mentioned reference in your article.

STEN ANDERSON, Director,
Portfolian Clubs

* * * * *

DEAR JOHNNY:

A perennial subject for argument among photographers is the merit of wooden tripods compared with metal ones. The following is a case in favor of the wooden one, as I see it. I hope you'll publish this letter and that it will draw you or some member out to defend the metal tripod in some future issue of PSA JOURNAL.

The wooden tripod has some elements in its favor which endear it to many photographers, more particularly to the professionals and the newspaper camera men. I can recall a comment in some notes made at a lecture by Frank Scherschell, well known news photographer and instructor in photo-journalism. He strongly advocated the Crown type of tripod for news photographers' use and demonstrated that he could make one do almost anything but sing and dance. Much of this is associated with its flexibility due to the freedom from restriction on the angle that the legs can take with the head. This flexibility shows up best on a hillside or extremely irregular ground where the "double-jointed" limberness comes in.

In spite of all of this flexibility, the wooden tripod is not limber or unsteady. If it were, it would not have the favor that it does with the men who depend on their cameras for a living. The wide and firm attachment of the legs to the large diameter head takes care of that. In spite of all this, it is probably lighter, and when disassembled and folded up, more compact than any other form. In addition, it is much less expensive than anything else that will carry the same load. Its durability is attested by its popularity in those same circles.

I have one which has served me very well for about fifteen years. This does not mean that I have not had to do a little work on it from time to time, but I know from experience with it and other types that repairs are easier on the wooden form. I recall an instance of a camera club group outing in a dunes area. One of the girls had some trouble when some sand got into one of the screw type lock joints of her shiny new tubular metal tripod. One of the gentlemen offered to clear the trouble and got a bit too strong, with the result that the tripod went back to the factory for repairs. I can safely recommend the wooden tripod in snow or

the mud of a creek bank. Many times I have done just that, then swished the tips around in the creek to wash off the mud.

The properties which set the wooden tripod off as preferable for some uses lead to slight differences in working methods. On floor or level ground, no great difference of original set up is evident. If one leg is pointed straight forward, or straight backward, easier levelling results from forward or backward, or sideways movement of that leg. Extension of the same technique, plus some leg shortening on the high side takes care of uneven ground. Rubber cane tips from the dime store guard against most possible slippage, although I know of one professional who loops a piece of stout cord through the square openings of the upper joining of his Crown tripod and ties it in rather snugly before putting his 8 x 10 Dordorf on top.

There is no reason why a metal tilt and panorama top cannot be used on the wooden tripod. I have done it for years and find it a good combination. Even without such a top, much in the way of tilting can be done with the tripod alone. With one leg to the front under the lens and shortened, a considerable downward tilt is possible. The opposite with the leg in back gives the upward tilt. There is another trick where by starting with one leg straight back, then swinging it to the front between the other two a surprising downward tilt of the head occurs with the tripod apparently standing straight up.

There is another shortened leg trick which will work with any tripod. If you are backed against a wall and want to get your camera as close to it as you can, shorten the back leg and let it hang while the wall and the other two legs carry the camera. Set up the wire frame finder (if your camera has one) and by walking out in front along the line of the frame and the back sight you can find out where the boundaries of your picture area are and make adjustments accordingly.

I would hardly suggest the wooden tripod for the small camera, but for anything from about 3 1/4 x 4 1/4 on up, it is hard to beat.

D. WARD PEASE, FPSA

DEAR WARD:

Thanks. Let's see what this brings from others.

JOHNNY APPLESEED, APSA

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